Education for Knowledge, Science and Culture"
-Shikshanmaharshi Dr. Bapuji Salunkhe

Shri Swami Vivekanand Shikshan Sanstha's

Vivekanand College, Kolhapur (Autonomous) Department Of Zoology

Syllabus Completion Report 2019-2020



Academic year: 2019-20

Syllabus Completion Report

Subject: Animal diversity

Course title: B.Sc. I

Semester: I

Teacher Name: -Dr. K. P. Shinde

| Month: July | | | Module unit | Sub unit planned | Completed / incompleted |
|-------------|-----------|-------|----------------|---|-------------------------|
| Lectures | Practical | Total | | | |
| 3 | 2 | 5 | Unit I | Importance of animal taxonomy Kingdom Protista | Completed |
| Month: A | August | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 5 | 4 | 9 | Unit I | Phylum- Porifera General characters and classification up to classes Canal system in sycon | Completed |
| Month: S | September | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 3 | 4 | 7 | Unit I | Phylum: Cnidaria General characters and classification upto classes Polymorphism in hydrozoa Locomotion and regeneration in Hydra | Completed |

Dr. K. P. Shinde

Head,

Vivekanand College. Kolhapur (Autonomous)

Academic year: 2019-20

Syllabus Completion Report

Subject: Comparative Anatomy & Developmental Biology of Vertebrates

Course title: B.Sc. I Semester: II

Teacher Name: -Dr. K. P. Shinde

| Month: November | | | Module unit | Sub unit planned | Completed / incompleted |
|-----------------|-----------------|-------|----------------|------------------------------------|-------------------------|
| Lectures | Practical | Total | | | |
| 2 | 2 | 4 | Unit I | Skeletal System Pectoral girdle | Completed |
| Month: I | Month: December | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 2 | 4 | 6 | Unit I | pelvic girdle | Completed |

- ALLEY

Dr. K. P. Shinde Head, Department of Zoology Vivekanand College, Kolhapur (Autonomous)

Academic year: 2019-20

Syllabus Completion Report

Subject: Physiology and Biochemistry

Course title: B.Sc. II

Semester: III

Teacher Name: -Dr. K. P. Shinde

| Month: July | | | Module unit | Sub unit planned | Completed/ incompleted |
|-------------|---------------|-------|----------------|---|---------------------------|
| Lectures | Practical | Total | | | |
| 2 | 2 | 4 | Unit II | Structure of Nephron Mechanism of urine formation | Completed |
| Month: Au | Month: August | | | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 3 | 4 | 7 | Unit II | Counter current mechanism | Completed |

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Dr. K. P. Shinde Head, Department of Zoology Vivekanand College, Kolhapur (Autonomous)

Academic year: 2019-20

Syllabus Completion Report

Subject: Cell biology, Genetics and Evolution

Course title: B.Sc. II

Semester: IV

Teacher Name: -Dr. K. P. Shinde

| Month: November | | | Module unit | Sub unit planned | Completed/ incompleted | |
|-----------------|----------------|-------|----------------|---|---------------------------|--|
| Lectures | Practical | Total | | | | |
| 2 | 2 | 4 | Unit III | Major event in history of life Geological time scale | Completed | |
| Month: December | | | Module unit | Sub unit planned | | |
| Lectures | Practical | Total | | | | |
| 4 | 4 | 8 | Unit III | Introduction to evolutionary theories Lamarkism | Completed | |
| Month: Ja | Month: January | | | Sub unit planned | | |
| Lectures | Practical | Total | | | | |
| 4 | 4 | 8 | Unit III | Darwinism & Neo Darwinism | Completed | |

Dr. K. P. Shinde

Academic year: 2019-20

Syllabus Completion Report

Subject: Functional anatomy of non-chordate

Course title: B.Sc. III

Semester: V

Teacher Name: -Dr. K. P. Shinde

| Month: July | | Module unit | Sub unit planned | Completed/ incompleted | |
|-------------|-----------|----------------|------------------|--|-----------|
| Lectures | Practical | Total | | | |
| 3 | 2 | 5 | Unit II | Type study-Leech Systematic position, habits & habitat, morphology & body wall | Completed |
| Month: A | August | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit II | Locomotion Food, feeding & digestive system Haemo-coelomic system Excretory system | Completed |
| Month: S | September | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 7 | Unit II | Sense organ Reproductive system Copulation & coccon formation | Completed |
| Month: (| Octomber | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 2 | 4 | 6 | Unit II | Parasitic adaption Economic importance of leech | Completed |

Dr. K. P. Shinde

Academic year: 2019-20

Syllabus Completion Report

Subject: Comparative Anatomy of Vertebrates; Applied Zoology

Course title: B.Sc. III Semester: VI

Teacher Name: -Dr. K. P. Shinde

| Month: December | | | Module unit | Sub unit planned | Completed/ incompleted |
|-----------------|-----------|-------|----------------|----------------------------------|---------------------------|
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit I | Endoskeleton Vertebral column | Completed |
| Month: J | anuary | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit I | Appendicular skeleton | Completed |
| Month: J | anuary | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit I | Apiculture | Completed |

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Dr. K. P. Shinde Head, Department of Zoology Vivekanand College, Kolhapur (Autonomous)

Academic year: 2019-20

Syllabus completion report (Practical)

Teacher Name: - Dr. K. P. Shinde

| Class | Practical No. | Batch | Practical based on paper | Complete/Incomplete |
|--------|---------------|--------|------------------------------|---------------------|
| B. Sc. | Practical I | B6, B4 | Animal Diversity (Section I) | Complete |
| I | | | Comparative Anatomy and | |
| | | | Developmental biology of | |
| | | | Vertebrates (Section II) | |
| B. Sc. | Practical II | M1 | Cell biology, Genetics, | Complete |
| II | | | Evolution and Ethology | |
| B. Sc. | Practical VII | Z1 | Comparative Anatomy of | Complete |
| III | | | Vertebrates and | |
| | | | Developmental Biology | |

- ALLEN

Dr. K. P. Shinde Head, Department of Zoology Vivekanand College, Kolhapur (Autonomous)

Academic year: 2019-20

Syllabus Completion Report

Subject: Comparative Anatomy & Developmental Biology of Vertebrates

Semester: II Course title: B.Sc. I

Teacher Name: -Dr. Tejashri C. Patil

| Month: November | | Module unit | Sub unit planned | Completed / incompleted | |
|-----------------|-----------|----------------|------------------|--|-----------|
| Lectures | Practical | Total | | | |
| 2 | 2 | 4 | Unit III | Late embryonic development- Implantation of embryo in human | Completed |
| Month: I | December | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit III | Formation of human placenta & its function | Completed |
| Month: J | anuary | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 2 | 4 | 6 | Unit III | Types of placenta in mammals | Completed |

Dr. Tejashri C. Patil

Dr. K. P. Shinde

Academic year: 2019-20

Syllabus Completion Report

Subject: Physiology and Biochemistry

Course title: B.Sc. II

Semester: III Teacher

Name: -Ms. Tejashri C. Patil

| Month: Ju | ly | | Module unit | Sub unit planned | Completed/ incompleted |
|-----------|---------------|-------|----------------|---|---------------------------|
| Lectures | Practical | Total | | | |
| 2 | 2 | 4 | Unit I | Physiology of Digestion in Alimentary Canal | Completed |
| Month: Au | Month: August | | | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit I | Absorption of Carbohydrate, proteins & lipids | Completed |

Ms. Tejashri C. Patil

Dr. K. P. Shinde

Academic year: 2019-20

Syllabus Completion Report

Subject: Cell biology, Genetics and Evolution

Course title: B.Sc. II

Semester: IV

Teacher Name: -Dr. Tejashri C. Patil

| Month: No | vember | | Module unit | Sub unit planned | Completed/ incompleted |
|-----------------|-----------|-------|----------------|--|---------------------------|
| Lectures | Practical | Total | | | |
| 2 | 2 | 4 | Unit IV | Direct evidences of evolution Types of fossils | Completed |
| Month: De | cember | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | . 8 | Unit IV | Process of fossilization Dating of fossils Geiger-Muller Counter | Completed |
| Month: Ja | nuary | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit IV | Species concept Biological species concept Modes of speciation | Completed |
| Month: February | | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit IV | Macroevolution Macro evolutionary principals Darwin finches | Completed |

Dr. Tejashri C. Patil

Dr. K. P. Shinde

Academic year: 2019-20

Syllabus Completion Report

Subject: Functional anatomy of non-chordates; Endocrinology, Env. Bio. &

toxicology; Biostatistics, Bioinformatics & medical zoology

Course title: B.Sc. III

Semester: V

Teacher Name: -Ms. Tejashri C. Patil

| Month: July | | Module unit | Sub unit planned | Completed/ incompleted | |
|-------------|-----------|----------------|------------------|--|-----------|
| Lectures | Practical | Total | | | |
| 2 | 2 | 4 | Unit III | Structure & phylogenetic importance Bipinaria & tornaria larva | Completed |
| Month: A | ugust | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 3 | 4 | 7 | Unit III | Minor phyla Salient feature Bigula, Sagita, lingula | Completed |
| Month: S | eptember | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit III | Toxicology Classification of toxicant Toxic agent & mode of action of pesticides | Completed |
| Month: C | October | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit I | Toxic agent & mode of action of metals & mycotoxins | Completed |
| Month: N | Vovember | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 2 | 4 | 6 | Unit III | Application of Biotechnology | Completed |

Ms. Tejashri C. Patil

Dr. K. P. Shinde

Academic year: 2019-20

Syllabus Completion Report

Subject: Physiology; Applied Zoology

Course title: B.Sc. III Semester: VI

Teacher Name: -Dr. Tejashri C. Patil

| Month: November | | | Module unit | Sub unit planned | Completed/ incompleted |
|-----------------|-----------|-------|----------------|---|---------------------------|
| Lectures | Practical | Total | | | |
| 2 | 2 | 4 | Unit I | Nutritional requirement & balanced diet | Completed |
| Month: D | ecember | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit III | Digestion & absorption | Completed |
| Month: J | anuary | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit III | Vitamins Excretion | Completed |
| Month: F | ebruary | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit III | Goat Farming | Completed |

Dr. Tejashri C. Patil

Dr. K. P. Shinde

Head,

Academic year: 2019-20

Syllabus completion report (Practical)

Teacher Name: - Dr. T. C. Patil

| Class | Practical No. | Batch | Practical based on paper | Complete/Incomplete |
|-----------|---------------|---------|------------------------------|---------------------|
| B. Sc. I | Practical I | B2 | Animal Diversity (Section I) | Complete |
| | | | Comparative Anatomy and | |
| | | | Developmental biology of | |
| | | | Vertebrates (Section II) | |
| B. Sc. II | Practical I | BT1, B3 | Mammalian Physiology and | Complete |
| | | | Biochemistry | |
| | Practical II | | Cell biology, Genetics, | |
| | | | Evolution and Ethology | |

Dr. T. C. Patil

Dr. K. P. Shinde

Vivekanamd/College, Kolhapur (Autonomous)

Academic year: 2019-20

Syllabus Completion Report

Subject: Animal diversity

Course title: B.Sc. I

Semester: I

Teacher Name: -Ms. Sneha S. Desai

| Month: July | | | Module unit | Sub unit planned | Completed / incompleted |
|-------------|-----------|-------|-------------|---|-------------------------|
| Lectures | Practical | Total | | | |
| 2 | 2 | 4 | Unit III | Phylogenetic tree in Chordate | Completed |
| Month: A | ugust | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit III | Protochordata Agnatha: General feature of Agnatha and classification of cyclostomes up to classes Peculiar characteristic of Petromyzon and myxin | Completed |
| Month: S | eptember | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit III | Class: Pisces General features and classification up to order Difference between cartilaginous and bony fishes Importance of osmoregulation in fishes | Completed |
| Month: (| October | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit III | Class-Amphibia General features and classification up to order Parental care in Amphibia | Completed |

Ms. Sneha S. Desai

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Dr. K. P. Shinde

Academic year: 2019-20

Syllabus Completion Report

Subject: Comparative Anatomy & Developmental Biology of Vertebrates

Course title: B.Sc. I Semester: II

Teacher Name: -Dr. Sneha S. Desai

| Month: November | | | Module unit | Sub unit planned | Completed / incompleted |
|-----------------|-----------|-------|-------------------|---|-------------------------|
| Lectures | Practical | Total | | | |
| 2 | 2 | 4 | Unit I | Digestive system of Fish, Amphibia | Completed |
| Month: D | ecember | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | . 8 | Unit I | Digestive system of reptiles, aves & mammals and its comparative account | Completed |
| Month: J | anuary | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 2 | 4 | 6 | Unit I Unit II | Digestive gland-Liver, pancreas salivary gland Introduction to Urinogenital system | Completed |
| Month: F | ebruary | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 2 | 2 | 4 | Unit II | Archenephros, pronephros, mesonephros & metanephros Evolution of uriogenital ducts | Completed |

Dr. Sneha S. Desai

Dr. K. P. Shinde

Academic year: 2019-20

Syllabus Completion Report

Subject: Cell biology, Genetics and Evolution

Course title: B.Sc. II

Semester: IV

Teacher Name: -Dr. Sneha S. Desai

| Month: No | ovember | | Module unit | Sub unit planned | Completed/ incompleted |
|-----------|-----------|-------|-------------------|---|---------------------------|
| Lectures | Practical | Total | | | - |
| 2 | 2 | 4 | Unit I | Mendelian genetics & its extension Principal of inheritance | Completed |
| Month: De | cember | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | _ | |
| 4 | 4 | 8 | Unit I | Chromosomal theory of inheritance Incomplete dominance & codominance | Completed |
| Month: Ja | nuary | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit I Unit II | Multiple alleles w.r.t. ABO, Rh factor Extrachromosomal inheritance Sex determination | Completed |
| Month: Fe | bruary | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 2 | 6 | Unit II | Sex determination Dosage compensation Sex chromosomal theory Genic balance theory Haploidy- diploidy mechanism of sex determination | Completed |

Dr. Sneha S. Desai

Dr. K. P. Shinde

Head,

Department of Zoology Jekanand College, Jinapur (Autonomous)

Academic year: 2019-20

Syllabus Completion Report

Subject: Biostatistics, Bioinformatics & Medical zoology

Course title: B.Sc. III

Semester: V

Teacher Name: -Ms. Sneha S. Desai

| Month: July | | | Module unit | Sub unit planned | Completed/ incompleted |
|-------------|-----------|-------|-------------|---|---------------------------|
| Lectures | Practical | Total | | | |
| 2 | 2 | 4 | Unit I | Biostatistics Classification, collection of data, types of classification | Completed |
| Month: A | Lugust | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit I | Frequency distribution, principle of frequency distribution, graphical representation | Completed |
| Month: S | September | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit I | Histogram Ogive curve Polygonal frequency curve Tabulation- requirements of good table & types of tabulation | Completed |
| Month: (| October | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit II | Measures of central tendency- Mean, mode & median Correlation & its types Scattered diagram Karl pearson's & spearman's rank correlation coefficient | Completed |

Ms. Sneha S. Desai

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Dr. K. P. Shinde

Academic year: 2019-20

Syllabus completion report (Practical)

Teacher Name: - Dr. S. S. Desai

| Class | Practical | Batch | Practical based on paper | Complete/Incomplete |
|-----------|-------------|--------|----------------------------------|---------------------|
| | No. | | | |
| B. Sc. I | Practical I | B8, B7 | Animal Diversity (Section I) | Complete |
| | | | Comparative Anatomy and | |
| | | | Developmental biology of | |
| | | | Vertebrates (Section II) | |
| B. Sc. II | Practical I | В3 | Mammalian Physiology and | Complete |
| | | | Biochemistry | |
| B. Sc. | Practical | Z1 | Molecular Biology, Biotechnology | Complete |
| III | VI | | and Biotechniques and | - |
| | | | Endocrinology, Environmental | |
| | | | Biology and Toxicology | |

Dr. S. S. Desai

Dr. K. P. Shinde

Academic year: 2019-20

Syllabus Completion Report

Subject: Physiology

Course title: B.Sç. III

Teacher Name: -Ms. Yogita S. Pujari

Semester: VI

| Month: November | | | Module unit | Sub unit planned | Completed/ incompleted |
|-----------------|-----------|-------|----------------|---------------------------------------|---------------------------|
| Lectures | Practical | Total | | | |
| 2 | 2 | 4 | Unit I | Physiology Carbohydrate metabolism | Completed |
| Month: I | December | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 3 | 4 | 7 | Unit I | Protein metabolism | Completed |
| Month: J | anuary | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 3 | 4 | 7 | Unit I | Lipid metabolism | Completed |

Ms. Yogita S. Pujari

Head, Hepartmant of Zoology Hivakonand Cohega Kothapur (Autonomnus Dr. K. P. Shinde

Academic year: 2019-20

Syllabus Completion Report

Subject: Developmental Biology

Course title: B.Sc. III

Semester: VI

Teacher Name: -Ms. Najnin A. Patel

| Month: November | | | Module unit | Sub unit planned | Completed/ incompleted |
|-----------------|-----------------|-------|----------------|--|---------------------------|
| Lectures | Practical | Total | | | |
| 2 | 2 | 4 | Unit I | Gametogenesis Process of fertilization | Completed |
| Month: D | ecember | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit I | Structure & types of eggs Cleavage | Completed |
| Month: J | anuary | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit I | Acadian tadpole & retrogressive metamorphosis | Completed |
| Month: I | Month: February | | | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 2 | 2 | 4 | Unit III | Development of Amphioxus upto coelom formation | Completed |

Ms. Najnin A. Patel

Viveyanand College.

Kolhabur (Autonomous

Dr. K. P. Shinde

Academic year: 2019-20

Syllabus completion report (Practical)

Teacher Name: - Dr. T. C. Goupale

| Class | Practical No. | Batch | Practical based on paper | Complete/Incomplete |
|-----------|----------------|-------|------------------------------|---------------------|
| B. Sc. I | Practical I | B1,B5 | Animal Diversity (Section I) | Complete |
| | | | Comparative Anatomy and | |
| | | | Developmental biology of | |
| | | | Vertebrates (Section II) | |
| B. Sc. II | Practical I | M1 | Mammalian Physiology and | Complete |
| | | | Biochemistry | |
| B. Sc. | Practical VIII | Z1 | Physiology and Applied | Complete |
| III | | | Zoology | |

Dr. T. Goupale

Head Department of Zoplogy 'uvexanand Cottega. Vott sput (Autonomous) Dr. K. P. Shinde

Academic year: 2019-20

Syllabus Completion Report

Subject: Physiology and Biochemistry

Course title: B.Sc. II

Semester: III

Teacher Name: -Dr. T. C. Gaupale

| Month: July | | | Module unit | Sub unit planned | Completed/ incompleted |
|----------------|-----------|----------------|------------------|--|---------------------------|
| Lectures | Practical | Total | | | |
| 2 | 2 | 4 | Unit III | Endocrinology Structure and functions of pituitary gland | Completed |
| Month: Au | igust | | Module unit | Sub unit planned | Module unit |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit III | Thyroid, parathyroid, pancreas, adrenal gland | Completed |
| Month: Se | ptember | | Module unit | Sub unit planned | Module unit |
| Lectures | Practical | Total | | | |
| 3 | 4 | 7 | Unit III | Hypothalamus Testes Ovary | Completed |
| Month: October | | Module unit | Sub unit planned | Module unit | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit IV | Mechanism of enzyme action Michaelis and Menten equation | Completed |

Dr. T.C. Gaupale

Dr. K. P. Shinde

Shri Swami Vivekanand Shikshan Sanstha's

VIVEKANAND COLLEGE, KOLHAPUR (AUTONOMOUS) DEPARTMENT OF ZOOLOGY

Academic year: 2019-20

Syllabus Completion Report

Subject: Comparative Anatomy & Developmental Biology of Vertebrates

Course title: B.Sc. I

Semester: II

Teacher Name: -Ms. Geetanjali B. Satale

| Month: November | | ovember N | | Sub unit planned | Completed / incompleted |
|-----------------|-----------|-----------|-------------|--|-------------------------|
| Lectures | Practical | Total | | | |
| 2 | 2 | 4 | Unit I | Integumentary system- Derivatives of integuments w.r.t. glands | Completed |
| Month: D | ecember | | Module unit | Sub unit planned | |
| Lectures | Practical | ·Total | | | |
| 2 | 4 | 6 | Unit I | Digital tips | Completed |

Ms. Geetanjali B. Satale

Dr. K. P. Shinde

Head,
Department of Zoology
Vivekanand College,
Shapur (Autonomous)

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Academic year: 2019-20

Syllabus Completion Report

Subject: Biostatistics, Bioinformatics & medical zoology; Molecular biology,

Biotechnology & Biotechniques

Course title: B.Sc. III

Semester: V

Teacher Name: -Ms. Najnin A. Patel

| Month: J | Month: July | | | Sub unit planned | Completed/ incompleted |
|----------|-------------|-------|----------------|--|---------------------------|
| Lectures | Practical | Total | | | |
| 3 | 2 | 5 | Unit II | Bioinformatics- Study of computer & its devices Three levels of bioinformatics in structural biology, Application of bioinformatics in life sciences | Completed |
| Month: A | August | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit II | Biotechnology- rDNA technology Restriction enzymes- DNA ligase, DNA polymerase, Cloning vectors | Completed |
| Month: S | eptember | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit III | DNA probes, PCR, Southern blotting, Separation techniques- TLC, gel electrophoresis | Completed |
| Month: C | October | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit III | Animal cell culture, stem cells | Completed |

Ms. Najnin A. Patel

Heaff, Department of Zoorogy Vivgsanand Cottege.

(calmagaut (Autonorous)

Dr. K. P. Shinde

Academic year: 2019-20

Syllabus Completion Report

Subject: Functional anatomy of non-chordates Course title: B.Sc. III

Course title: B.Sc. III Semester: V

Teacher Name: -Ms. Geetanjali B. Satale

| Month: | July | | Module unit | Sub unit planned | Completed/ incompleted |
|----------|---------------------|-------|----------------|--|---------------------------|
| Lectures | Practical | Total | | | |
| 2 | 2 | 4 | Unit I | Protozoa Nutrition in protozoa | Completed |
| Month: | August | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit I | Reproduction in protozoa Canal system Coelenterata-polymorphism in obelia | Completed |
| Month: S | September | | Module unit | Sub unit planned | |
| Lectures | Practical Practical | Total | | | |
| 4 | 4 | 8 | Unit I | polymorphism in porpita coral & coral reefs Salient features of ctenophora | Completed |
| Month: (| October | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit I | Insect metamorphosis & hormonal control Stridulation in cicada & cricket Mollusca- Torsion & detortion | Completed |

Ms. Geetanjali B. Satale

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Dr. K. P. Shinde

Academic year: 2019-20

Syllabus completion report (Practical)

Teacher Name: - Ms. G. B. Satale

| Class | Practical | Batch | Practical based on paper | Complete/Incomplete |
|-----------|---------------|-------|-------------------------------|---------------------|
| | No. | | | |
| B. Sc. II | Practical II | B2 | Cell biology, Genetics, | Complete |
| | | | Evolution and Ethology | |
| B. Sc. | Practical VII | Z2 | Comparative Anatomy of | Complete |
| III | | | Vertebrates and Developmental | |
| | | | Biology | |

Ms. G. B. Satale

Hessell.

Department of Zoology
Vivelianand Cottegs.

Hhabur (Autonomous)

And the

Dr. K. P. Shinde

Head.

Academic year: 2019-20

Syllabus completion report (Practical)

Teacher Name: - Ms. J. S. Sathe

| Class | Practical | Batch | Practical based on paper | Complete/Incomplete |
|-----------|--------------|---------|------------------------------|---------------------|
| | No. | | | |
| B. Sc. I | Practical I | B2 | Animal Diversity (Section I) | Complete |
| | Practical II | | Comparative Anatomy and | |
| | , | | Developmental biology of | |
| | | | Vertebrates (Section II) | |
| B. Sc. II | Practical II | BT1, B4 | Cell biology, Genetics, | Complete |
| | | | Evolution and Ethology | |
| B. Sc. | Practical V | Z2 | Functional Anatomy of Non- | Complete |
| III | | | Chordates and Biostatistics, | |
| | | | Bioinformatics & Medical | |
| | | | Zoology. | |

Ms. J. S. Sathe

Dr. K. P. Shinde

Academic year: 2019-20

Syllabus Completion Report

Subject: Functional anatomy of non-chordates

Course title: B.Sc. III Semester: V

Teacher Name: -Ms. Jyoti S. Sathe

| Month: J | ulv | | Module | Sub unit planned | Completed/ |
|------------------|-----------|-------|----------------|--|-------------|
| | v | | unit | The state of the s | incompleted |
| Lectures | Practical | Total | | | |
| 2 | 2 | 4 | Unit III | Echinodermata- Sea star Systematic position, habits & habitat | Completed |
| Month: August | | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit III | Morphology & body wall Food, feeding & digestive system Water vascular system | Completed |
| Month: September | | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | | Unit III | Reproductive system Nervous system & sense organ Haemal & perihaemal system | Completed |

Ms. Jyoti S. Sathe

Seute

Dr. K. P. Shinde

Head?

Department of Zoology

Vivekanar/College;

Penaltment of Zeglegy
Vivekanand College,
Kothapur (Autonomous)

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Academic year: 2019-20

Syllabus Completion Report

Subject: Endocrinology, Env. Bio. & toxicology

Course title: B.Sc. III

Semester: V

Teacher Name: -Ms. Yogita S. Pujari

| Month: | Month: July | | | Sub unit planned | Completed/ incompleted |
|----------|-------------|-------|----------------|--|---------------------------|
| Lectures | Practical | Total | | | |
| 2 | 2 | 4 | Unit II | Environmental biology Biodiversity Definition & scope | Completed |
| Month: A | August | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit II | Protection Conservation strategies Utilization | Completed |
| Month: S | eptember | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit II | National Park -Kaziranga, Sanjay Gandhi, Tadoba National park Sanctuaries- Bharatpur, radhnagari | Completed |
| Month: C | October | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 2 | 4 | 6 | Unit III | Characteristic & faunal adaptations w.r.t. Fresh water, marine water & terrestrial habitat | Completed |

Ms. Yogita S. Pujar

Department of Zoology
Vivexanund College
Helment (Autonomous)

Dr. K. P. Shinde

Academic year: 2019-20

Syllabus Completion Report

Subject: Comparative Anatomy & Developmental Biology of Vertebrates

Course title: B.Sc. I

Semester: II

Teacher Name: -Ms. Yogita S. Pujari

| Month: N | November | | Module unit | Sub unit planned | Completed / incompleted |
|----------|-----------|-------|----------------|--|-------------------------|
| Lectures | Practical | Total | | | |
| 2 | 2 | 4 | Unit IV | Fundamental development, process in development, gene activation, specification | Completed |
| Month: I | December | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 3 | 4 | 7 | Unit IV | Determination, differentiation, intercellular communication, cell movement & cell dealth | Completed |

Ms. Yogita S. Pujari

Dr. K. P. Shinde

Academic year: 2019-20

Syllabus Completion Report

Subject: Physiology and Biochemistry

Course title: B.Sc. II Semester: III Teacher

Name: -Ms. Najnin A. Patel

| Month: J | uly | | Module unit | Sub unit planned | Completed/ incompleted |
|----------|-----------|-------|---------------------|--|---------------------------|
| Lectures | Practical | Total | | | |
| 2 | 2 | 4 | Unit III | Carbohydrate metabolism Glycolysis | Completed |
| Month: A | ugust | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit III | Kreb cycle Pentose phosphate pathway Gluconeogenesis Glycogen metabolism | Completed |
| Month: S | eptember | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit III Unit IV | Review of electron transport chain Lipid metabolism Biosynthesis of fatty acids | Completed |
| Month: 0 | October | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit IV | Beta oxidation of palmitic acid | Completed |
| Month: N | lovember | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit IV | Protein metabolism Trans amination Deamination | Completed |

Ms. Najnin A. Patel

Head Department of Zoology Vivexanand College Kolhebur (Autonomous) Dr. K. P. Shinde

Academic year: 2019-20

Syllabus completion report (Practical)

Teacher Name: - Ms. N. A. Patel

| Class | Practical | Batch | Practical based on paper | Complete/Incomplete |
|------------|-------------|-------|------------------------------|---------------------|
| | No. | | | |
| B. Sc. I | Practical I | В6 | Animal Diversity (Section I) | Complete |
| | | | Comparative Anatomy and | |
| | | | Developmental biology of | |
| | | | Vertebrates (Section II) | |
| B. Sc. II | Practical I | B1 | Mammalian Physiology and | Complete |
| | | | Biochemistry | |
| B. Sc. III | Practical V | Z1 | Functional Anatomy of Non- | Complete |
| | | | Chordates and Biostatistics, | |
| | | | Bioinformatics & Medical | |
| | | | Zoology. | |

Ms. N. A. Patel

Dr. K. P. Shinde

Academic year: 2019-20

Syllabus Completion Report

Subject: Developmental Biology; Physiology

Course title: B.Sc. III

Teacher Name: -Ms. Geetanjali B. Satale

| Month: November | | | Module unit | Sub unit planned | Completed/ incompleted |
|-----------------|-----------|-------|----------------|--|---------------------------|
| Lectures | Practical | Total | | | |
| 2 | 2 | 4 | Unit III | Organizer- Concept & process of induction | Completed |
| Month: I | December | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 3 | 4 | 7 | Unit I | Study of fetal membrane Placenta types | Completed |
| Month: J | anuary | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit III | Significance of placenta Cloning techniques | Completed |
| Month: I | ebruary | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |

Unit III

Nerve & Muscle physiology

Ms. Geetanjali B. Satale

Dr. K. P. Shinde

Completed

Semester: VI

Head,
Department of Zoology
Vivekanand College,
Kolhapur (Autonomous)

Academic year: 2019-20

Syllabus Completion Report

Subject: Applied Zoology

Course title: B.Sc. III Semester: VI

Teacher Name: -Ms. Kranti L. Kamble

| Month: November | | | Module unit | Sub unit planned | Completed/ incompleted |
|-----------------|-----------|-------|----------------|-----------------------|---------------------------|
| Lectures | Practical | Total | | | |
| 2 | 2 | 4 | Unit II | Pest & its management | Completed |
| Month: E | December | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit II | Dairy Farming | Completed |
| Month: J | anuary | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 3 | 4 | 7 | Unit II | Poultry Farming | Completed |

Ms. Kranti L. Kamble

Head
Department of Zoorogy
Vivekanand Collega
Kolnaput (Autondrydus)

Dr. K. P. Shinde

Academic year: 2019-20

Syllabus completion report (Practical)

Teacher Name: - Ms. Y. S. Pujari

| Class | Practical | Batch | Practical based on paper | Complete/Incomplete |
|-----------|--------------|--------|-----------------------------------|---------------------|
| | No. | | | |
| B. Sc. II | Practical I | B1, B4 | Mammalian Physiology and | Complete |
| | | | Biochemistry | |
| | Practical II | | Cell biology, Genetics, Evolution | |
| | | | and Ethology | |
| B. Sc. | Practical | Z2 | Molecular Biology, Biotechnology | Complete |
| III | VI | | and Biotechniques and | |
| | | | Endocrinology, Environmental | |
| | | | Biology and Toxicology | |

Ms. Y. S. Pujari

Dr. K. P. Shinde

Head, Soliday partment of Zoology (vekanand College, Solhapur (Autonomous)

Head.
Programment of Zoology
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....()appl (Autonominous)

Academic year: 2019-20

Syllabus Completion Report

Subject: Biostatistics, Bioinformatics & Medical zoology

Semester: V Course title: B.Sc. III

Teacher Name: -Ms. Kranti L. Kamble

| Month: July | | | Module unit | Sub unit planned | Completed/ incompleted |
|-------------|-----------|-------|-------------|--|---------------------------|
| Lectures | Practical | Total | | | |
| 2 | 2 | 4 | Unit III | Medical Zoology Pathogenicity & prophylaxis of microbes | Completed |
| Month: A | ugust | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit III | Pathogenicity & prophylaxis of virus- Herpes, Rabies, Ebola Spirochetes | Completed |
| Month: S | eptember | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit III | Bacteria- Salmonella typhi, Mycobacterium tuberculosis Pathogenic protozoan & their control | Completed |
| Month: 0 | October | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit III | Pathogenic helminthes & their control Ascaris & Wucheria Mosquito as vector of disease | Completed |
| Month: N | November | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | - | |
| 3 | 4 | 7 | Unit III | Study of Antibiotics w.r.t. Chemical nature & action | Completed |

Ms. Kranti L. Kamble

Dr. K. P. Shinde Head.

Department of Zoology Vivekanand College, Keihapur (Autonomous)

360 BH 1 Denamment of Zhology Nivekanand Collega küğnağur (Autohemous)

Academic year: 2019-20

Syllabus Completion Report

Subject: Cell biology, Genetics and Evolution

Course title: B.Sc. II

Semester: IV

Teacher Name: -Dr. T. C. Gaupale

| Month: No | vember | | Module unit | Sub unit planned | Completed/ incompleted |
|------------|-----------|-------|------------------|---|---------------------------|
| Lectures | Practical | Total | | | |
| 2 | 2 | 4 | Unit III | Organic variation Isolating mechanism Natural selection | Completed |
| Month: De | cember | _ | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit III | Industrial melanism Types of natural selection | Completed |
| Month: Jan | nuary | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit III & IV | Artificial selection Mass extinction | Completed |
| Month: Fe | bruary | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 2 | 4 | 6 | Unit IV | Role of extinction in evolution | Completed |

Dr. T. C. Gaupale

Dr. K. P. Shinde

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Head,
Department of Zoology
Vivekanand College,
Kolhapur (Autonomous)

Head Canaminent of Zontopy exanging College Inabut (Autonomous)

Academic year: 2019-20

Syllabus Completion Report

Subject: Comparative Anatomy & Developmental Biology of Vertebrates

Course title: B.Sc. I

Semester: II

Teacher Name: -Dr. T.C. Gaupale

| Month: November | | | Module unit | Sub unit planned | Completed / incompleted |
|-----------------|-----------|-------|----------------|--|----------------------------|
| Lectures | Practical | Total | | | |
| 2 | 2 | 4 | Unit IV | Chick Embryology Introduction to Embryology | Completed |
| Month: D | December | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit IV | Fertilization in chick | Completed |
| | | | | Development up to72 hrs | |
| Month: J | anuary | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit IV | Development up to72 hrs | Completed |

Dr. T. C. Gaupale

Dr. K. P. Shinde

Head,
Department of Zoology
Vivekanand College,
Kolhapur (Autonomous)

Head Considered of Josings Histograph College Kolleger (Autonomous)

Academic year: 2019-20

Syllabus Completion Report

Subject: Animal diversity

Course title: B.Sc. I

Teacher Name: -Ms. Najnin A. Patel

| Month: July | | | Module unit | Sub unit planned | Completed / incompleted |
|----------------|-----------|----------------|------------------|--|-------------------------|
| Lectures | Practical | Total | | | • |
| 2 | 2 | 4 | Unit IV | Class-Reptiles General features and classification up to order | Completed |
| Month: A | August | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit IV | classification up to order in class reptiles Venomous and non-venomous snake and types of venom | Completed |
| Month: S | September | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit IV | Class Aves General features and classification up to order Flight Adaptation | Completed |
| Month: October | | Module unit | Sub unit planned | | |
| Lectures | Practical | Total | | | |
| 4 | 4 , | 8 | Unit IV | Class Mammals Classification up to order | Completed |
| | | | | | |

Ms. Najnin A. Patel

Planend College

Dr. K. P. Shinde

Semester: I

Head, Department of Zoology Vivekanand College,

Kolhapur (Autonomous)

Academic year: 2019-20

Syllabus completion report (Practical)

Teacher Name: - Ms. K. L. Kamble

| Class | Practical No. | Batch | Practical based on paper | Complete/Incomplete |
|------------|----------------|---------|------------------------------|---------------------|
| B. Sc. I | Practical I | B3, B8, | Animal Diversity (Section I) | Complete |
| | | В9 | Comparative Anatomy and | |
| | | | Developmental biology of | |
| | | | Vertebrates (Section II) | |
| B. Sc. II | Practical I | B2 | Mammalian Physiology and | Complete |
| | | | Biochemistry | |
| B. Sc. III | Practical VIII | Z2 | Physiology and Applied | Complete |
| | | | Zoology | |

Ms. K. L. Kamble

mannenat Zodelga. Viveksessä flogege. Kelhebut (Autonamous)

Academic year: 2019-20

Syllabus Completion Report

Subject: Comparative Anatomy of Vertebrates; Applied Zoology

Course title: B.Sc. III

Semester: VI

Teacher Name: -Dr. Sneha S. Desai

| Month: November | | | Module unit | Sub unit planned | Completed/ incompleted |
|-----------------|-----------------|----------------|-------------------|---|---------------------------|
| Lectures | Practical | Total | | | |
| 2 | 2 | 4 | Unit I | Evolution of heart | Completed |
| Month: D | Month: December | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit I | Aortic arches & portal system | Completed |
| Month: J | anuary | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit I Unit II | Excretory system- Evolution of Kidney & ducts | Completed |
| Month: February | | Module unit | Sub unit planned | | |
| Lectures | Practical | Total | | | |
| 3 | 4 | 7 | Unit II | Pearl & Prawn culture | Completed |

Dr. Sneha S. Desai

Dr. K. P. Shinde

Heald Department of Zoology Vivetianand College Kolhapair (Ald bromous)

Academic year: 2019-20

Syllabus Completion Report

Subject: Endocrinology, Env. Bio. & toxicology

Course title: B.Sc. III

Semester: V

Teacher Name: -Dr. T. C. Gaupale

| Month: July | | | Module unit | Sub unit planned | Completed/ incompleted |
|----------------|-----------|----------------|------------------|---|---------------------------|
| Lectures | Practical | Total | | | |
| 2 | 2 | 4 | Unit I | Endocrinology Study of endocrine glands & anatomy, histology of hormones | Completed |
| Month: A | August | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit I | Thyroid gland & parathyroid- Nature, role, regulation & disorder | Completed |
| Month: S | September | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit I | Adrenal gland & islets of langerhans- Nature, role, regulation & disorder | Completed |
| Month: October | | Module unit | Sub unit planned | | |
| Lectures | Practical | Total | | | |
| 2 | 4 | 6 | Unit I | Hormones receptor & mechanism of hormonal action Prostaglandins | Completed |

Dr. T. C. Gaupale

Dr. K. P. Shinde

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Head. Department of Zotkogy: Vivekanand Conegu. Kolhapur (Autoborrous)

Academic year: 2019-20

Syllabus Completion Report

Subject: Cell biology, Genetics and Evolution

Course title: B.Sc. II

Semester: IV

Teacher Name: -Ms. Najnin A. Patel

| Month: November | | | Module unit | Sub unit planned | Completed/ incompleted |
|-----------------|-----------|-------|----------------|--|---------------------------|
| Lectures | Practical | Total | | | |
| 2 | 2 | 4 | Unit I | Ultra-structure of cell organelles Prokaryotic & Eukaryotic cell | Completed |
| Month: Dec | cember | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit I | Ultra-structure & function of plasma membrane Nucleus Mitochondria Golgi Apparatus | Completed |
| Month: Jar | nuary | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit I | Endoplasmic reticulum Ribosome Mendel's work on transmission of traits Genetic variation | Completed |

Ms. Najnin A. Patel

Department of Zoology Vivekanarki College, Kolnabur (Autonomass)

Academic year: 2019-20

Syllabus Completion Report

Subject: Physiology and Biochemistry

Course title: B.Sc. II Semester: III Teacher

Name: -Ms. Sneha S. Desai

| Month: August | | | Module unit | Sub unit planned | Completed/ incompleted |
|-----------------|---|----------------|------------------|--|---------------------------|
| Lectures | Practical | Total | | | |
| 3 | 4 | 7 | Unit II | Respiration Pulmonary ventilation, respiratory volumes & capacity | Completed |
| Month: S | September | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit II | Transport of oxygen, carbon dioxide in blood Respiratory diseases | Completed |
| Month: (| October | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| .00 | 4 .ltsself on3 to Enembe enot (Autonoma) | VIV | Unit II | Cardiovascular system Composition of blood Structure of heart Origin & conduction of cardiac impulse Cardiac cycle | Completed |
| Month: November | | Module unit | Sub unit planned | | |
| Lectures | Practical | Total | | | |
| 2 | 4 | 6 | Unit II | Heart diseases & heart attack Symptoms & remedies | Completed |

Ms. Sneha S. Desai

Academic year: 2019-20

Syllabus Completion Report

Subject: Comparative Anatomy & Developmental Biology of Vertebrates

Course title: B.Sc. I

Semester: II

Teacher Name: -Ms. Najnin A. Patel

| Month: November | | Module unit | Sub unit planned | Completed / incompleted | |
|-----------------|-----------|----------------|------------------|--|-----------|
| Lectures | Practical | Total | | | |
| 2 | 2 | 4 | Unit II | Sense organs & types of receptors | Completed |
| Month: D | ecember | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| | 4 | 8 | Unit III | Early embryonic development Gametogenesis- Spermatogenesis, Oogenesis with reference to mammals | Completed |
| Month: J | anuary | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit III | External fertilization (Amphibia), internal fertilization mammals, early embryonic development | Completed |
| Month: I | ebruary | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 2 | 2 | 4 | Unit III | Fate map & Neurulation in frog embryo | Completed |

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Hepameent of Zookogy Vivekanand Cokege Kolmeper (Autopymous)

Ms. Najnin A. Patel

Academic year: 2019-20

Syllabus Completion Report

Subject: Physiology, Applied Zoology

Course title: B.Sc. III

Semester: VI

Teacher Name: -Ms. Jyoti S. Sathe

| Month: November | | | Module unit | Sub unit planned | Completed/ incompleted |
|-----------------|-----------------|-------|----------------|------------------|---------------------------|
| Lectures | Practical | Total | | | |
| 2 | 2 | 4 | Unit II | Respiration | Completed |
| Month: I | Month: December | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit II | Circulation | Completed |
| Month: J | Month: January | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit II | Vermiculture | Completed |

Ms. Jyoti S. Sathe

Dr. K. P. Shinde

Haatt. Depertment of Zeology Victoriand Cosego Kolnspur (Autonomous)

Academic year: 2019-20

Syllabus Completion Report

Subject: Developmental Biology; Applied Zoology

Course title: B.Sc. III

Teacher Name: -Dr. T.C. Gaupale

| Month: November | | | Module unit | Sub unit planned | Completed/ incompleted |
|-----------------|-----------------|----------------|------------------|---|---------------------------|
| Lectures | Practical | Total | | | |
| 2 | 2 | 4 | Unit II | Introduction to Developmental biology | Completed |
| Month: D | Month: December | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit II | Fertilization in chick Development up to72 hrs | Completed |
| Month: J | anuary | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit II | Development up to72 hrs | Completed |
| Month: February | | Module unit | Sub unit planned | | |
| Lectures | Practical | Total | | | |
| 3 | 2 | 5 | Unit II | Fisheries | Completed |

Dr. T. C. Gaupale

Dr. K. P. Shinde

Semester: VI

Academic year: 2019-20

Syllabus Completion Report

Subject: Cell biology, Genetics and Evolution

Course title: B.Sc. II

Semester: IV

Teacher Name: -Ms. Geetanjali B. Satale

| Month: November | | | Module unit | Sub unit planned | Completed/ incompleted |
|-----------------|-----------|-------|----------------|--|---------------------------|
| Lectures | Practical | Total | | | |
| 2 | 2 | 4 | Unit I | Linkage & crossing over Types of linkage | Completed |
| Month: December | | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit I | Mechanism of crossing over Coupling & repulsion theory Cytological evidences of crossing over | Completed |
| Month: January | | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit II | Mutation Chromosomal mutation- Deletion, Duplication, Inversion Induced versus spontaneous mutation | Completed |

Ms. Geetanjali B. Satale

O Batale

Dr. K. P. Shinde

Head Department of Zoology Vivekanand Corega Kohapur (Autoremous)

Academic year: 2019-20

Syllabus Completion Report

Subject: Physiology and Biochemistry

Course title: B.Sc. II Semester: III Teacher

Name: -Ms. Geetanjali B. Satale

| Month: July | | | Module unit | Sub unit planned | Completed/ incompleted |
|------------------|-----------|-------|----------------|--|---------------------------|
| Lectures | Practical | Total | | | |
| 2 | 2 | 4 | Unit I | Nerve & Muscle Structure of Neuron | Completed |
| Month: August | | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit I | Resting membrane potential Origin of action potential & its propogation in nonmyleinated nerve fiber | Completed |
| Month: September | | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 4 | 4 | 8 | Unit I | Ultra-Structure of skeletal muscle Molecular & Chemical basis of muscle contraction | Completed |

Ms. Geetanjali B. Satale

Galate

Dr. K. P. Shinde

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Academic year: 2019-20

Syllabus Completion Report

Subject: Comparative Anatomy & Developmental Biology of Vertebrates

Course title: B.Sc. I

Semester: II

Teacher Name: -Ms. Kranti L. Kamble

| Month: November | | | Module unit | Sub unit planned | Completed / incompleted |
|-----------------|-----------|-------------|------------------|--------------------------------|-------------------------|
| Lectures | Practical | Total | | | |
| 2 | 2 | 4 | Unit I | Brief account of gills | Completed |
| Month: December | | Module unit | Sub unit planned | | |
| Lectures | Practical | Total | | | |
| 3 | 4 | 7 | Unit I | Lungs, air sacs & swim bladder | Completed |

Ms. Kranti L. Kamble

Dr. K. P. Shinde

Head Department of Zopiogy Vivefidinand College: Kolhaguir (Autonomous)

Academic year: 2019-20

Syllabus Completion Report

Subject: Animal diversity

Course title: B.Sc. I

Semester: I

Teacher Name: -Ms. Kranti L. Kamble

| Month: July | | | Module unit | Sub unit planned | Completed / incompleted |
|------------------|-----------|-------------|------------------|--|-------------------------|
| Lectures | Practical | Total | | | |
| 2 | 2 | 4 | Unit II | Phylum Arthropoda General characters and classification up to class Social behavior in honey bee | Completed |
| Month: A | August | | Module unit | Sub unit planned | |
| Lectures | Practical | Total | | • | |
| 4 | 4 | 8 | Unit II | Phylum Mollusca General characters and classification up to class Economic importance of Mollusca | Completed |
| Month: September | | Module unit | Sub unit planned | | |
| Lectures | Practical | Total | | • | |
| 4 | 4 | 8 | Unit II | Phylum Echinodermata General characters and classification up to class Water vascular system in Star fish, pedicillaria in Echinodermata | Completed |

Ms. Kranti L. Kamble

Academic year: 2019-20

Syllabus Completion Report

Subject: Animal diversity

Course title: B.Sc. I

Teacher Name: -Dr. T. C. Gaupale

Semester: I

| Teacher Name: -Dr. | | | | Sub unit planned | Completed / |
|--------------------|-----------|-------------|----------|--|-------------|
| Month: July | | Module unit | | Sub unit planned | incompleted |
| _ | | m . I | | | meompieted |
| Lectures | Practical | Total | | Distribution of the land of the control of the cont | Completed |
| 2 | 2 | 4 | Unit I | Phylum Platyhelminthes | Completed |
| | | | | General characters and | |
| | | | | classification up to classes | |
| | | | | Morphology of Taenia solium and | |
| | | | | its parasitic adaptation | |
| Month: A | ugust | Module unit | | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 3 | 4 | 7 | Unit I | Preventive measures and control | Completed |
| | | | | measures | |
| | | | | Phylum-Nemathelminthes | |
| | | | | General characters and | |
| | | | | classification up to classes | |
| | | | | Life history of Ascaris | |
| | | | | lumbricoides and its parasitic | |
| | | | | adaption | |
| Month: September | | Modu | le unit | Sub unit planned | |
| Lectures Practical | | Total | | • | |
| 3 | 4 | 7 | Unit I | Preventive measures and control | Completed |
| 3 | 4 | , | Unit II | measures | |
| | | | Cilit II | Phylum-Annelida | |
| | | | | General characters and | |
| | | | | classification up to classes | |
| | | | | classification up to classes | |
| Month: October | | Modu | le unit | Sub unit planned | |
| Lectures | Practical | Total | | | |
| 2 | 4 | 6 | Unit II | Metamerism in Annelida | Completed |

Dr. T. C. Gaupale

