

“Education for Knowledge, Science and Culture”

-Shikshanmaharshi Dr. Bapuji Salunkhe

Shri Swami Vivekanand Shikshan Sanstha's  
**Vivekanand College, Kolhapur (Autonomous)**  
Department of Zoology

## **Annual Teaching Plan 2018-2019**

- 1) **Dr. K. P. Shinde**
- 2) **Dr. T. C. Gaupale**
- 3) **Miss. N. A. Patel**
- 4) **Miss. N. A. Jadhav**
- 5) **Miss. A. K. Bhilugade**
- 6) **Miss. K. L. Kamble**



Shri Swami Vivekanand Shikshan Sanstha's  
**Vivekanand College, Kolhapur (Autonomous)**  
 Department of Zoology  
 Academic year: 2018-2019  
Annual Teaching Plan

Teacher's Name: Dr. K. P. Shinde

**CLASS: B.SC. I**

**SEMESTER: I**

	Month	Title of Paper	Unit
<b>Theory</b>	July	Paper- I Animal Diversity	Section I: Unit – II- Phylum- Annelida
	August		Section I: Unit – II- Phylum- Annelida Phylum- Arthropoda
	September		Section I: Unit – II- Phylum- Mollusca
	October		Section I: Unit – II- Phylum- Echinodermata
	November		Section I: Unit – II- Phylum- Echinodermata

	Month	Practical	Practicals based on Paper
<b>Practical</b>	July- November	Practical- I & II(Batch B2,B4,B6)	Zoology Lab Course (I) based on Paper- I, Zoology Lab Course (II) based on Paper- II

**CLASS: B.SC. I**

**SEMESTER: II**

	Month	Title of Paper	Unit
<b>Theory</b>	December	Paper- II Comparative Anatomy and Developmental Biology of Vertebrates	Section I: Unit – I- Integumentary System
	January		Section I: Unit – I- Skeletal System
	February		Section I: Unit – I- Digestive System
	March		Section I: Unit – I- Respiratory System

	Month	Practical	Practicals based on Paper
<b>Practical</b>	December- March	Practical- I & II(Batch B2,B4,B6)	Zoology Lab Course (I) based on Paper- I, Zoology Lab Course (II) based on Paper- II

**CLASS: B.SC. II**

**SEMESTER: III**

	Month	Title of Paper	Unit
<b>Theory</b>	July	Paper – VI Genetics and Biological Chemistry	Unit – II: A. Interaction of genes –i,ii
	August		Unit – I: Study of Nonchordates- A-i,ii
	September	Paper -V - Animal Diversity-III	Unit – I: Study of Nonchordates- A-iii,iv
	October		Unit – I: Study of Nonchordates B –i, ii, iii
	November		Unit – I: Study of Nonchordates B –iv

	Month	Practical	Practicals based on Paper
<b>Practical</b>	July- November	Practical-IV (Batch-M <sub>1</sub> ,B <sub>2</sub> )	PR-II (Based on Paper- VII and VIII)



**CLASS: B.SC. II****SEMESTER: IV**

	Month	Title of Paper	Unit
Theory	December	Paper VII Animal Diversity - IV	Unit I: Study of Chordates- A
	January		Unit I: Study of Chordates- A
	February		Unit II : Study of Rat Part I- i, ii, iii, iv
	March		Unit II : Study of Rat Part I- v

	Month	Practical	Practicals based on Paper
Practical	December- March	Practical-IV(Batch- M <sub>1</sub> ,B <sub>2</sub> )	PR-II (Based on Paper- VII and VIII)

**CLASS: B.SC. III****SEMESTER: V**

	Month	Title of Paper	Unit/Topics
Theory	July	Paper - IX Functional Anatomy of Non-Chordates	Unit – I:- I. Protozoa, II. Porifera
	August		Unit – I:- III. Coelenterata, IV, V
	September		Unit – II:- VII. Annelida- (a-e)
	October		Unit – II:- VII. Annelida- (f-l)
	November		Unit – I:- VI, VII


	Month	Practical	Practicals based on Paper
Practical	July- November	Practical- VII (Batch Z1)	Paper- XIII and XIV

**CLASS: B.SC. III****SEMESTER: VI**

	Month	Title of Paper	Unit
Theory	December	Paper- XIII Comparative Anatomy of Vertebrates	Unit – I:- I. Integument
	January		Unit – I:- II. Endoskeleton
	February		Unit – I:- III. Digestive System IV. Respiratory System
	March		Unit – I:- V. Circulatory System

	Month	Practical	Practicals based on Paper
Practical	December- March	Practical- VII (Batch Z1)	Paper- XIII and XIV

  
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Teacher's Name: Dr. T. C. Gaupale

**CLASS: B.SC. I**

**SEMESTER: I**

	Month	Title of Paper	Unit
<b>Theory</b>	July	Paper- I Animal Diversity	Section II: Unit – III- Protochordates
	August		Section II: Unit – III- Protochordates
	September		Section II: Unit – III- Agnatha
	October		Section II: Unit – III- Agnatha
	November		Section II: Unit – III- Agnatha

	Month	Practical	Practicals based on Paper
<b>Practical</b>	July-November	Practical- I & II(Batch B1,B3,B5)	Zoology Lab Course (I) based on Paper- I, Zoology Lab Course (II) based on Paper- II

**CLASS: B.SC. I**

**SEMESTER: II**

	Month	Title of Paper	Unit
<b>Theory</b>	December	Paper- II Comparative Anatomy and Developmental Biology of Vertebrates	Section I: Unit – II- Circulatory System
	January		Section I: Unit – II- Circulatory System
	February		Section I: Unit – II- Urinogenital System
	March		Section I: Unit – II- Urinogenital System

	Month	Practical	Practicals based on Paper
<b>Practical</b>	December-March	Practical- I & II(Batch B1,B3,B5)	Zoology Lab Course (I) based on Paper- I, Zoology Lab Course (II) based on Paper- II

**CLASS: B.SC. II**

**SEMESTER: III**

	Month	Title of Paper	Unit
<b>Theory</b>	July	Paper – VI Genetics and Biological Chemistry	Unit – II: B. Lethal Genes – i, ii
	August		Unit – II: B. Lethal Genes – iii, iv
	September	Paper -V Animal Diversity-III	Unit – II: A. Crab
	October		Unit – II: B. Cockroach- i-v
	November		Unit – II: B. Cockroach- vi, vii

	Month	Practical	Practicals based on Paper
<b>Practical</b>	July-November	Practical-III (Batch-M <sub>1</sub> ,B <sub>2</sub> )	PR-I (Based on Paper- V and VI)



**CLASS: B.SC. II****SEMESTER: IV**

	Month	Title of Paper	Unit
Theory	December	Paper VII Animal Diversity - IV	Unit I: Study of Chordates-B- i, ii
	January		Unit I: Study of Chordates-B -iii, iv
	February		Unit III : Study of Rat- Part II- i, ii, iii
	March		Unit III : Study of Rat- Part II- iv, v

	Month	Practical	Practicals based on Paper
Practical	December- March	Practical-III (Batch- M <sub>1</sub> ,B <sub>2</sub> )	PR-I (Based on Paper- V and VI)

**CLASS: B.SC. III****SEMESTER: V**

	Month	Title of Paper	Unit
Theory	July	Paper -XI Molecular Biology, Biotechnology and Biotechniques	Unit - I:- I. Molecular Biology - 1
	August		Unit - I:- I. Molecular Biology -2,3,4
	September		Unit - I:- I. Molecular Biology - 5
	October		Unit - II:- II. Biotechnology- 1
	November		Unit - II:- II. Biotechnology- 1


	Month	Practical	Practicals based on Paper
Practical	July-November	Practical- VIII (Batch Z1)	Paper- XV and XVI

**CLASS: B.SC. III****SEMESTER: VI**

	Month	Title of Paper	Unit
Theory	December	Paper- XIII Comparative Anatomy of Vertebrates	Unit - III:- VI. Excretory System
	January		Unit - III:- VI. Nervous System
	February	Paper- XIV Developmental Biology	Unit - III:- VII, VIII
	March		Unit - III:- IX, X

	Month	Practical	Practicals based on Paper
Practical	December- March	Practical- VIII (Batch Z1)	Paper- XV and XVI

  
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Teacher's Name: Miss. N. A. Patel

**CLASS: B.SC. I**

**SEMESTER: I**

	Month	Title of Paper	Unit
<b>Theory</b>	July	Paper- I Animal Diversity	Section II: Unit – III- Pisces
	August		Section II: Unit – III- Pisces
	September		Section II: Unit – III- Pisces
	October		Section II: Unit – III- Amphibia
	November		Section II: Unit – III- Amphibia

	Month	Practical	Practicals based on Paper
<b>Practical</b>	July-November	Practical- I & II (Batch B6)	Zoology Lab Course (I) based on Paper- I, Zoology Lab Course (II) based on Paper- II

**CLASS: B.SC. I**

**SEMESTER: II**

	Month	Title of Paper	Unit
<b>Theory</b>	December	Paper- II Comparative Anatomy and Developmental Biology of Vertebrates	Section II: Unit – IV- Control of Development
	January		Section II: Unit – IV- Control of Development
	February		Section II: Unit – IV- Chick Embryology
	March		Section II: Unit – IV- Chick Embryology

	Month	Practical	Practicals based on Paper
<b>Practical</b>	December- March	Practical- I & II (Batch B6)	Zoology Lab Course (I) based on Paper- I, Zoology Lab Course (II) based on Paper- II

**CLASS: B.SC. II**

**SEMESTER: III**

	Month	Title of Paper	Unit
<b>Theory</b>	July	Paper – VI Genetics and Biological Chemistry	Unit – II: Genetics. C. Twins in human
	August	Paper -V Animal Diversity-III	Unit – III: Pila- i, ii, iii
	September		Unit – III: Pila- iii, iv
	October		Unit – III: Pila- v
	November		Unit – III: Pila- vi

	Month	Practical	Practicals based on Paper
<b>Practical</b>	July-November	Practical-III (Batch- B <sub>1</sub> ,BT <sub>1</sub> )	PR-I (Based on Paper- V and VI)



**CLASS: B.SC. II****SEMESTER: IV**

	Month	Title of Paper	Unit
<b>Theory</b>	December	Paper VII Animal Diversity - IV	Unit IV :- i
	January		Unit IV :- ii, iii
	February		Unit IV :- iv
	March	Paper – VIII Histology and Physiology	Unit IV : Physiology Part II – A

	Month	Practical	Practicals based on Paper
<b>Practical</b>	December- March	Practical-III (Batch- B <sub>1</sub> ,BT <sub>1</sub> )	PR-I (Based on Paper- V and VI)

**CLASS: B.SC. III****SEMESTER: V**

	Month	Title of Paper	Unit
<b>Theory</b>	July	Paper- X Biostatistics, Bioinformatics and Medical Zoology	Unit – I:- I. Biostatistics- 1
	August		Unit – I:- I. Biostatistics- 2, 3
	September		Unit – I:- I. Biostatistics- 4, 5
	October		Unit – II:- I. Biostatistics- 6
	November		Unit – II:-II. Bioinformatics- a

	Month	Practical	Practicals based on Paper
<b>Practical</b>	July-November	Practical- V and VI (Batch Z1,Z2)	Paper- IX, X and XI, XII


**CLASS: B.SC. III****SEMESTER: VI**

	Month	Title of Paper	Unit
<b>Theory</b>	December	Paper- XV Physiology	Unit – I:- I. Nutrition
	January		Unit – I:- II. Metabolism
	February		Unit – II:- III. Vitamins, IV. Respiration
	March		Unit – II:- V. Circulation

	Month	Practical	Practicals based on Paper
<b>Practical</b>	December- March	Practical- V and VI(BatchZ1,Z2)	Paper- IX, X and XI, XII



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**CLASS: B.SC. I**

**SEMESTER: I**

	Month	Title of Paper	Unit
<b>Theory</b>	July	Paper- I Animal Diversity	Section II: Unit – IV- Reptiles
	August		Section II: Unit – IV- Reptiles
	September		Section II: Unit – IV- Aves
	October		Section II: Unit – IV- Mammals
	November		Section II: Unit – IV- Mammals

	Month	Practical	Practicals based on Paper
<b>Practical</b>	July-November	Practical- I & II(Batch B7,B8,B9)	Zoology Lab Course (I) based on Paper- I, Zoology Lab Course (II) based on Paper- II

**CLASS: B.SC. I**

**SEMESTER: II**

	Month	Title of Paper	Unit
<b>Theory</b>	December	Paper- II Comparative Anatomy and Developmental Biology of Vertebrates	Section II: Unit – III- Early Embryonic Development
	January		Section II: Unit – III- Early Embryonic Development
	February		Section II: Unit – III- Early Embryonic Development
	March		Section II: Unit – III- Early Embryonic Development

	Month	Practical	Practicals based on Paper
<b>Practical</b>	December-March	Practical- I & II(Batch B7,B8,B9)	Zoology Lab Course (I) based on Paper- I, Zoology Lab Course (II) based on Paper- II

**CLASS: B.SC. II**

**SEMESTER: III**

	Month	Title of Paper	Unit
<b>Theory</b>	July	Paper – VI Genetics and Biological Chemistry	Unit – IV- A-i
	August		Unit – IV- A-ii
	September	Paper -V – Animal Diversity-III	Unit – IV- A
	October		Unit – IV- B, C
	November		Unit – IV- D

	Month	Practical	Practicals based on Paper
<b>Practical</b>	July-November	Practical-III (Batch- B <sub>3</sub> ,B <sub>4</sub> )	PR-I (Based on Paper- V and VI)



**CLASS: B.SC. II****SEMESTER: IV**

	Month	Title of Paper	Unit
<b>Theory</b>	December	Paper – VIII Histology and Physiology	Unit – I :- i, ii
	January		Unit – I :- iii, iv, v
	February		Unit – I :- vi, vii, viii
	March		Unit – IV :- B

	Month	Practical	Practicals based on Paper
<b>Practical</b>	December- March	Practical-III (Batch- B <sub>3</sub> ,B <sub>4</sub> )	PR-I (Based on Paper- V and VI)

**CLASS: B.SC. III****SEMESTER: V**

	Month	Title of Paper	Unit
<b>Theory</b>	July	Paper- X Biostatistics, Bioinformatics and Medical Zoology	Unit– III:-III) Medical Zoology–1. a)
	August		Unit– III:-III) Medical Zoology-1. b) c), 2, 3
	September		Unit– III:-III) Medical Zoology- 4, 5
	October	Paper –XI Molecular Biology, Biotechnology and Biotechniques	Unit – III:- II.Biotechnology- 3 III. Biotechniques - 1
	November		Unit – III:-III. Biotechniques – 2


	Month	Practical	Practicals based on Paper
<b>Practical</b>	July-November	Practical- V and VI(Batch Z1,Z2)	Paper- IX, X and XI, XII

**CLASS: B.SC. III****SEMESTER: VI**

	Month	Title of Paper	Unit
<b>Theory</b>	December	Paper- XIV Developmental Biology	Unit – I :- I, II, III
	January		Unit – I :- IV, V
	February		Unit – II :- VII
	March		Unit – II :- VII

	Month	Practical	Practicals based on Paper
<b>Practical</b>	December- March	Practical- V and VI(BatchZ1,Z2)	Paper- IX, X and XI, XII

  
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**CLASS: B.SC. I**

**SEMESTER: I**

	Month	Title of Paper	Unit
<b>Theory</b>	July	Paper- I Animal Diversity	Section I: Unit – I- Kingdom- Protista
	August		Section I: Unit – I- Kingdom- Protista
	September		Section I: Unit – I- Phylum- Porifera
	October		Section I: Unit – I- Phylum- Cnidaria
	November		Section I: Unit – I- Phylum- Cnidaria

	Month	Practical	Practicals based on Paper
<b>Practical</b>	July-November	Practical- I & II	Zoology Lab Course (I) based on Paper- I, Zoology Lab Course (II) based on Paper- II

**CLASS: B.SC. I**

**SEMESTER: II**

	Month	Title of Paper	Unit
<b>Theory</b>	December	Paper- II Comparative Anatomy and Developmental Biology of Vertebrates	Section II: Unit – III- Late Embryonic Development
	January		Section II: Unit – III- Late Embryonic Development
	February		Section II: Unit – III- Late Embryonic Development
	March		Section II: Unit – III- Late Embryonic Development

	Month	Practical	Practicals based on Paper
<b>Practical</b>	December-March	Practical- I & II	Zoology Lab Course (I) based on Paper- I, Zoology Lab Course (II) based on Paper- II

**CLASS: B.SC. II**

**SEMESTER: III**

	Month	Title of Paper	Unit
<b>Theory</b>	July	Paper – VI Genetics and Biological Chemistry	Unit I– A- i, ii
	August		Unit I– A- iii, iv, Unit I– B
	September		Unit I– C
	October		Unit IV– B.- i-iv
	November		Unit IV– B.- v

	Month	Practical	Practicals based on Paper
<b>Practical</b>	July-November	Practical-IV (Batch- B <sub>1</sub> ,BT <sub>1</sub> )	PR-II (Based on Paper- VII and VIII)



**CLASS: B.SC. II****SEMESTER: IV**

	Month	Title of Paper	Unit
Theory	December	Paper – VIII Histology and Physiology	Unit – II :- i, ii
	January		Unit – II :- iii, iv
	February		Unit – II :- v: Unit – IV :- C. i
	March		Unit – IV :- C. ii

	Month	Practical	Practicals based on Paper
Practical	December-March	Practical-IV (Batch- B <sub>1</sub> ,BT <sub>1</sub> )	PR-II (Based on Paper- VII and VIII)

**CLASS: B.SC. III****SEMESTER: V**

	Month	Title of Paper	Unit
Theory	July	Paper - IX Functional Anatomy of Non-Chordates	Unit – III:- X
	August		Unit – III:- IX, VIII
	September		Unit – III:-VIII
	October	Paper – XII Endocrinology, Environmental Biology and Toxicology	Unit – I:- I
	November		Unit – I:- I

	Month	Practical	Practicals based on Paper
Practical	July-November	Practical- VII(Batch Z2)	Paper- XIII and XIV

**CLASS: B.SC. III****SEMESTER: VI**

	Month	Title of Paper	Unit
Theory	December	Paper- XV Physiology	Unit – III:- VI, VII
	January		Unit – III:- VIII
	February	Paper- XVI Applied Zoology	Unit – II:- iv, v
	March		Unit – II:- vi, vii

	Month	Practical	Practicals based on Paper
Practical	December-March	Practical- VII(Batch Z2)	Paper- XIII and XIV

*AKBhilugade*

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**CLASS: B.SC. I**

**SEMESTER: I**

	Month	Title of Paper	Unit
<b>Theory</b>	July	Paper- I Animal Diversity	Section I: Unit – I- Phylum-Platyhelminthes
	August		Section I: Unit – I- Phylum-Platyhelminthes
	September		Section I: Unit – I- Phylum-Platyhelminthes
	October		Section I: Unit – I- Phylum-Nemathelminthes
	November		Section I: Unit – I- Phylum-Nemathelminthes

	Month	Practical	Practicals based on Paper
<b>Practical</b>	July- November	Practical- I & II	Zoology Lab Course (I) based on Paper- I, Zoology Lab Course (II) based on Paper- II

**CLASS: B.SC. I**

**SEMESTER: II**

	Month	Title of Paper	Unit
<b>Theory</b>	December	Paper- II Comparative Anatomy and Developmental Biology of Vertebrates	Section I: Unit – II- Nervous System
	January		Section I: Unit – II- Nervous System
	February		Section I: Unit – II- Sense Organs
	March		Section I: Unit – II- Sense Organs

	Month	Practical	Practicals based on Paper
<b>Practical</b>	December- March	Practical- I & II	Zoology Lab Course (I) based on Paper- I, Zoology Lab Course (II) based on Paper- II

**CLASS: B.SC. II**

**SEMESTER: III**

	Month	Title of Paper	Unit
<b>Theory</b>	July	Paper – VI Genetics and Biological Chemistry	Unit III– A- i
	August		Unit III– A- ii, iii
	September		Unit III– B- ( i-iii)
	October		Unit III– C - i, ii, iii
	November		Unit III– C – iv, v

	Month	Practical	Practicals based on Paper
<b>Practical</b>	July-November	Practical-IV (Batch- B <sub>3</sub> ,B <sub>4</sub> )	PR-II (Based on Paper- VII and VIII)



**CLASS: B.SC. II****SEMESTER: IV**

	Month	Title of Paper	Unit
Theory	December	Paper – VIII Histology and Physiology	Unit – III:- i
	January		Unit – III:- ii, iii
	February		Unit – III:- iv, v
	March		Unit – III:- vi

	Month	Practical	Practicals based on Paper
Practical	December- March	Practical-IV (Batch- B <sub>3</sub> ,B <sub>4</sub> )	PR-II (Based on Paper- VII and VIII)

**CLASS: B.SC. III****SEMESTER: V**

	Month	Title of Paper	Unit
Theory	July	Paper – XII Endocrinology, Environmental Biology and Toxicology	Unit – II:- 2
	August		Unit – II:- 4, 5
	September		Unit – III:- 6
	October		Unit – III:- III.Toxicology
	November		Unit – II:- 3

	Month	Practical	Practicals based on Paper
Practical	July- November	Practical- VIII (Batch Z2)	Paper- XV and XVI

**CLASS: B.SC. III****SEMESTER: VI**

	Month	Title of Paper	Unit
Theory	December	Paper- XVI Applied Zoology	Unit – I:- I
	January		Unit – I:- I ; II- i
	February		Unit – II:- iii
	March		Unit – II:- ii

	Month	Practical	Practicals based on Paper
Practical	December- March	Practical- VIII (Batch Z2)	Paper- XV and XVI



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