



JAWAHAR ARTS, SCIENCE & COMMERCE COLLEGE

Anadur, Tq. Tuljapur, Dist- Osmanabad -413603



INTERNAL QUALITY ASSURANCE CELL

Annual/Semester Teaching Plane, Academic Year 2021 - 22, Department of ZOOLOGY

Name of Teacher: Dr. G.T. Rathod

Subject: ZOOLOGY, Class: B.Sc I (Sem. I), Total Period.: 45

Semester: I, Name of Paper: Protozoa to Annelida., Paper No.: I

| Sr.No. | Month | Total Periods In Month | Name of Chapter /Unit | Teaching Method Use | Remark |
|--------|----------|------------------------|--|---------------------|--------|
| 1. | | | 1. Introduction to Animal Kingdom | chart & Models | |
| | | | Def. of zoology outline classification | PPT | |
| | | | Protozoa, Parasites, Metazoa | Explanation | |
| 2. | | | 2. Protozoa | Discussion | |
| | | | Plasmodium N. Stom. of sporozoite | | |
| | Oct-2021 | 13 | Life cycle | | |
| | | | Pathogenicity, control, Prevention | | |
| | | | Treatment of malaria | | |
| | | | E. Histolytica. structure | | |
| | | | Life cycle control. | | |
| | | | Euglena. - Morphology | | |
| | | | Reproductive system | | |
| 3 | | | 3. Porifera. | charts/models | |
| | | | Morphology of spon | PPT | |
| | | | Different type of cell in spon. | | |
| | | | canal system in porifera. | | |
| 4 | Nov-2021 | 12 | 4. Coelenterata. | | |
| | | | Morphology of obelia | | |
| | | | Development of Hydra. | | |
| | | | polymorphism in Coelenterata | | |

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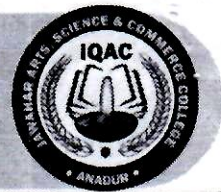
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Dr. G.T. Rathod P.T.O. →
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INTERNAL QUALITY ASSURANCE CELL

Annual/Semester Teaching Plane, Academic Year 202 - 2 , Department of _____

Name of Teacher: _____

Subject: _____, Class: _____, Total Period. : _____

Semester: _____, Name of Paper: _____, Paper No. : _____

| Sr.No. | Month | Total Periods In Month | Name of Chapter /Unit | Teaching Method Use | Remark |
|--------|----------|------------------------|-------------------------------------|---------------------|--------|
| 5. | | | 5. Helminthes | | |
| | | | A) STR. OF Fasciola Hepatica | | |
| | | | Life cycle of F. hepatica. | | |
| | | | pathogenicity & control measures | | |
| | Dec-2024 | 12 | B) STR. OF scolex of T. solium | | |
| | | | Mature & Gravid proglottids | | |
| | | | Life cycle of T. solium. | | |
| | | | pathogenicity & control measures | | |
| | | | C) STR. Male & Female of Ascaris L. | | |
| | | | Life cycle of Ascaris. Lubricoides | chart/Models | |
| | | | pathogenicity & control measures. | PPT | |
| 6 | Jan-22 | 08 | 6. Annelida classification | | |
| | | | Morphology of leech | | |
| | | | Digestive system of leech | | |
| | | | Excretory system of leech | | |
| | | | Reproductive system of leech | | |

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INTERNAL QUALITY ASSURANCE CELL

Annual/Semester Teaching Plane, Academic Year 2021 - 22, Department of Zoology

Name of Teacher: Dr. G.T. Rathod

Subject: Zoology, Class: BBC I (sem. II), Total Period.: 45

Semester: II, Name of Paper: Genetics-I, Paper No.: V

| Sr.No. | Month | Total Periods In Month | Name of Chapter /Unit | Teaching Method Use | Remark |
|--------|-----------------|------------------------|--|----------------------|--------|
| 1. | | | <u>Elements of heredity, variation</u> | <u>chart/models</u> | |
| | | | <u>Defⁿ of Genetics, variation</u> | <u>PPT</u> | |
| | | | <u>Mendel's law of heredity in short</u> | <u>Explanation</u> | |
| 2. | | | <u>Gene interaction</u> | <u>discussion</u> | |
| | <u>Mar-2022</u> | <u>08</u> | <u>Defⁿ modification in Mendelism</u> | | |
| | | | <u>phenotypic ratio like.</u> | | |
| | | | <u>Epistasis</u> | | |
| | | | <u>supplementary gene.</u> | | |
| | | | <u>complementary gene</u> | <u>charts/models</u> | |
| | | | <u>PPT</u> | | |
| 3 | | | <u>Multiple Alleles</u> | | |
| | | | <u>Coat colour in rabbit</u> | | |
| | | | <u>ABO, Blood group in Man, Rh factor</u> | | |
| 4 | | | <u>cytoplasmic inheritance</u> | | |
| | <u>Apr 2022</u> | <u>13</u> | <u>Defⁿ of Maternal effects</u> | <u>charts/models</u> | |
| | | | <u>coiling shell in snail.</u> | <u>PPT</u> | |
| | | | <u>Male sterility</u> | | |
| | | | <u>Co2 Sensitivity in Drosophila.</u> | | |
| | | | <u>Kappa particles in Paramecium</u> | | |
| 5 | | | <u>Sex. Determination</u> | | |
| | | | <u>chromosome theory in sex</u> | | |
| | | | <u>determination</u> | | |

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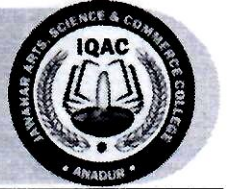
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Annual/Semester Teaching Plane, Academic Year 2021 - 22, Department of ZOOLOGY

Name of Teacher: Dr. G. T. Rathod

Subject: ZOOLOGY, Class: BSC II, Total Period. : _____

Semester: III, Name of Paper: Genetics - II, Paper No. : 45

| Sr.No. | Month | Total Periods In Month | Name of Chapter /Unit | Teaching Method Use | Remark |
|--------|----------|------------------------|--|---------------------|--------|
| 1. | | | Gene & expression | charts/models | |
| | | | Def ⁿ , concept & Function of gene. | PPT. | |
| | | | Transcription of gene Initiation | Explanations | |
| | | | Elongation, Termination. | Discussion | |
| | | | Genetic code - concept Codon | | |
| | Oct-2022 | 13 | properties of genetic code | | |
| | | | Translation of gene. Initiation | | |
| | | | Elongation, Termination | | |
| 2 | | | Population Genetics | | |
| | | | Gene pool, gene frequency | | |
| | | | Hardy-Weinberg's Law | | |
| | | | Application of Hardy-Weinberg's Law | | |
| 3. | | | Human Genetics | chart/models | |
| | | | Human chromosome | PPT | |
| | | | sex-Linked inheritance X & Y Linked | | |
| | | | Dizygotic & Monozygotic twins | | |
| | Nov-2022 | 12 | Inborn error in metabolism | | |
| | | | PKU & Albinism | | |
| | | | Genetic disorders, Down's syndrome. | | |
| | | | Turner's & Klinefelter syndromes | | |
| | | | Use of human genetics | | |

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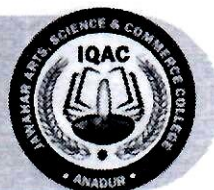
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Annual/Semester Teaching Plane, Academic Year 2021 - 22, Department of Zoology

Name of Teacher: Dr. G.T. Rathod

Subject: Zoology, Class: BBC II, Total Period. : 45

Semester: IV, Name of Paper: Biochemistry & Endocrinology, Paper No. : XII

| Sr.No. | Month | Total Periods In Month | Name of Chapter /Unit | Teaching Method Use | Remark |
|--------|-------------------|------------------------|--|----------------------|--------|
| 1. | | | <u>Enzymes. Defⁿ. concept</u> | <u>charts/models</u> | |
| | | | <u>Nomenclature</u> | <u>PPT</u> | |
| | | | <u>properties, classification</u> | <u>Explanation</u> | |
| | | | <u>Mechanism of enzyme action</u> | <u>Discussion</u> | |
| | <u>MAR-2022</u> | <u>08</u> | <u>factors affecting enzyme action</u> | | |
| 2. | | | <u>Carbohydrates. -Defⁿ. classification</u> | | |
| | | | <u>Monosaccharide, disaccharide, oligo-</u> | | |
| | | | <u>-Saccharides & polysaccharides</u> | | |
| | | | <u>Metabolism - Glucogenesis. Glucoo</u> | <u>charts/models</u> | |
| | | | <u>genesis, Glycolysis. TCA</u> | <u>PPT</u> | |
| | | | <u>oxidative phosphorylation.</u> | | |
| | | | <u>Proteins - Defⁿ. classification.</u> | | |
| | <u>APRIL-2022</u> | <u>13</u> | <u>simple conjugated & derived proteins.</u> | | |
| | | | <u>Strm. of protein -Primary, secondary</u> | | |
| | | | <u>Tertiary & quaternary</u> | | |
| | | | <u>Metabolism - Deamination</u> | | |
| | | | <u>Transamination</u> | | |
| 4. | | | <u>Lipids -Defⁿ. classification</u> | | |
| | | | <u>Simple, compound & derived lipids.</u> | | |
| | | | <u>Metabolism - B-oxidation</u> | | |
| | | | <u>Cholesterol biosynthesis</u> | | |

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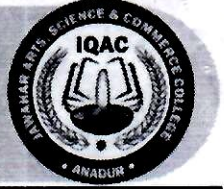
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Name of Teacher: _____

Subject: _____, Class: _____, Total Period. : _____

Semester: _____, Name of Paper: _____, Paper No. : _____

| Sr.No. | Month | Total Periods In Month | Name of Chapter /Unit | Teaching Method Use | Remark |
|--------|-----------|------------------------|----------------------------------|---------------------|--------|
| 5. | | | Vitamins - Sources, Deficiency | | |
| 6. | | | Endocrine system of Vertebrates | | |
| | | | Introduction - Def. of endocrine | | |
| | | | Paracrine, Autocrine system | | |
| | May-2022 | 13 | sign. endocrine, neuro | | |
| 7. | | | Pituitary gland - morphology | | |
| | | | Histological structure. | | |
| | | | Hormones & their function | | |
| 8. | | | Thyroid gland - morphology | | |
| | | | Histological structure. | charts/notes ppt | |
| | | | Hormones & their function. | | |
| 9. | | | Adrenal gland - morphology | | |
| | June-2022 | 11 | Histological structure. | | |
| | | | Hormones & their function. | | |
| 10. | | | Pancreas - Islets of Langerhans | | |
| | | | Histological structure | | |
| | | | Hormones & their function. | | |

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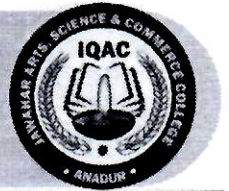
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Annual/Semester Teaching Plane, Academic Year 2021 - 22, Department of ZOOLOGY

Name of Teacher: Dr. G.T. Rathod

Subject: ZOOLOGY, Class: BSc III, Total Period. : 45

Semester: V, Name of Paper: Fishery science-2, Paper No. : XVI

| Sr.No. | Month | Total Periods In Month | Name of Chapter /Unit | Teaching Method Use | Remark |
|--------|----------|------------------------|---|---------------------|--------|
| 1. | | | Introduction | charts/model | |
| | | | definition and history | PPT | |
| | | | General character & classification | Explanatory | |
| | | | concept of blue revolution | discussion | |
| | | | Importance of fishes. | | |
| 2. | Oct-2021 | 13 | Freshwater fisheries | | |
| | | | Status of Fresh water fisheries | | |
| | | | Past, present & future. | | |
| | | | Freshwater capture fisheries | | |
| | | | Cat, & Trout fishes. | | |
| | | | effect of aquatic pollution on fisheries. | charts/models PPT | |
| 3. | Nov.2021 | 13 | Revering & Reservoir fisheries. | | |
| | | | Major river system of India | | |
| | | | Important fisheries of Indian rivers system | | |
| | | | Major Reservoirs of Maharashtra | | |
| | | | Reservoir fisheries and its Management. | | |
| | | | Exploitation of Reservoir fisheries. | | |

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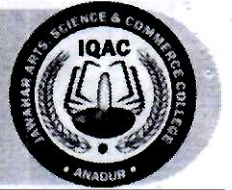
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Name of Teacher: _____

Subject: _____, Class: _____, Total Period. : _____

Semester: _____, Name of Paper: _____, Paper No. : _____

| Sr.No. | Month | Total Periods In Month | Name of Chapter /Unit | Teaching Method Use | Remark |
|--------|----------|------------------------|---------------------------------|---------------------|--------|
| 4. | | | Brackish water Fisheries | | |
| | | | Principle Fisheries of B. Water | | |
| | | | Milk, Mullet & Tilapia Fish. | | |
| | Dec 2021 | 12 | Fisheries of the Chitka Lake | | |
| | | | Pulicat & Kolleru Lake. | | |
| 5. | | | Marine water Fisheries | | |
| | | | oil sardine | | |
| | | | Mackerel Fisheries | | |
| | | | Ribbon Fish Fisheries | charts/models | |
| | | | Bombay-duct Fisheries | | |
| | Jan-2022 | 08 | Pomfret Fishery | | |
| 6. | | | Application of remote Sensing | | |
| | | | technique in pelagic Fisheries | | |
| | | | | | |
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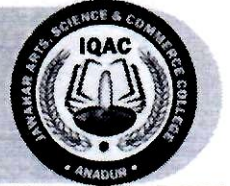
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Annual/Semester Teaching Plane, Academic Year 2021 - 22, Department of zoology

Name of Teacher: Dr. G. T. Rathod

Subject: Zoology, Class: BSc III, Total Period. : 45

Semester: VI, Name of Paper: Fishery science - II, Paper No. : XX

| Sr.No. | Month | Total Periods In Month | Name of Chapter /Unit | Teaching Method Use | Remark |
|--------|------------|------------------------|-------------------------------------|---------------------|--------|
| 1. | | | Introduction | charts/models ppt | |
| | | | Type of freshwater ponds. | Explanation | |
| | | | perennial & seasonal | discussion | |
| | Mar-2022 | 09 | Different types of ponds Nursery | | |
| | | | Rearing & stocking ponds. | | |
| | | | Design, construction & Maintenance | | |
| | | | of Nursery, rearing & stocking pond | | |
| | | | productivity of ponds. | | |
| | | | Principles of fish collection | charts/models ppt | |
| | | | Fish culture methods | | |
| | | | cultura-cat Fisheries. | | |
| | April-2022 | 13 | SWearge Fed- Fisheries | | |
| 2. | | | Fish crop production | | |
| | | | Protozoa, Fungal, bacterial, | | |
| | | | Viral worm disease. | | |
| 3. | | | Breeding of Fishes | chart/models | |
| | | | Natural spawning of | | |
| | | | carps. | | |
| | | | Artificial breeding by | | |
| | | | Hyphysation | | |
| | | | common carp breeding | | |

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