1.3.2 Syllabus of courses that include experiential learning through project work/field work/internship.

Laboratory Exercises:

Use Photographs / transparencies / permanent slides / charts

1. Mendel's laws using seed / plastic beads and applying chi-square.
2. Chromosome mapping using point test cross data.
3. Problems related to Lethal Genes, Co-dominance, and epistasis gene interaction (12:3:1; 13:3; 15:1; 9:6:1)
4. Sex determination in plants, *Drosophila* and humans
5. Photographs showing sex linked inheritance
6. Chloroplast variation in Four O'clock plant
7. Plant Propagation techniques – Vegetative (Layering/ Grafting/ Budding)
8. Hybridization techniques: Emasculation – types, Bagging and tagging
9. Pollen viability test - *In vitro* a. Brewbaker's medium preparation
   b. Staining test in acetocarmine
   In vivo – Pollen Germination on stigma (through style; through ovule)
10. Systematic description and artificial hybridization of locally available crop plants.
11. Identification of important varieties of locally available crops* - Cereals (Wheat, RicMaize); millets (Sorghum); Pulses (Gram, Pea); Oil seeds (Mustard, Ground nut &Sunflower); Fiber (Cotton).

* **Note:** Center of origin, habit and its utility (parts used) should be taught.

1. Frequent Industrial / Laboratory visits are necessary
2. Submit Industrial / Laboratory visit report duly signed by HOD.

Suggested Readings:

1. **Backcock., E.B. (2001).** *Genetics and Plant breeding.* Agrobios (India), Jodhpur
2. **Gardner, E.J., Simmons, M.J., Snustad, D.P. (2008):** *Principles of Genetics.* VIII Edition. Wiley India.
3. **Griffiths, A.J.F., Wessler, S.R., Lewontin, R.C. and Carroll, S.B.** *Introduction to Genetic Analysis.* IX Edition. W. H. Freeman and Co.
4. **Gupta P.K.,** *'Genetics'.* Rastogi Publications.
5. **James D. Watson, Nancy H. Hopkins. (1987):** *'Molecular Biology of the Gene'.* IV Edition,

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GONDWANA UNIVERSITY, GADCHIROLI
CHOICE BASED CREDIT SYSTEM (CBCS) SYLLABUS
PROGRAMME – BACHLOR OF SCIENCE (B.Sc.), SEMESTER – V
SUBJECT – ZOOLOGY PRACTICAL (CREDIT 2)
SKILL ENHANCEMENT COURSE (SEC)
PRACTICAL

Max. Marks: 35

1. To study the identification of different species of Honey bees
2. To Study different stages in life cycle of Honey bees.
3. To study the different instruments for bee keeping
4. Visit to Apiculture industry/Local Apiculture Unit

Practical Question Paper and Distribution of Marks

Time: 4 Hrs. **Max. Marks: 35**

Practical	**Distribution of Marks**
1. Identification of Honey bees through ICT	10
2. Identification of instruments through ICT	10
4. Visit tour report	15

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1.3.2

SkillEnhancement Courses (SEC-IV)

Theory Examination Pattern

TheoryQuestion Paper Pattern
For
B.Sc. BOTANY CBCS
SEMESTER – VI
Skill Enhancement Courses (SEC-IV)

Time: 02 Hours] **[Max. Marks- 30**

Q.1. Long question .....10 Marks

Q.2. Short question
a) .....5 Marks
b) .....5 Marks

Q.3. MCQ .....10 Marks
(Ten MCQ each of ONE mark)

Practical Examination Assessment Pattern

Assessment of practical Examination is based on the following fulfillment by the student.

6.	Project Submission	20 Marks
7.	Project Presentation	20 Marks
8.	Assignments	10 Marks
9.	Field Visit	10 Marks
10.	Overall Performance	10 Marks
Total Marks		**70 Marks**

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GONDWANA UNIVERSITY GADCHIROLI

SEMESTER SYSTEM SYLLABUS

FOR

B.Sc. Part III

Subject- Zoology

Semester – VI

Paper - I: General Mammalian Physiology –II

Unit –I : Nerve and Muscle Physiology

1. Types of neurons, E.M. structure of neuron
2. Conduction of nerve impulse
3. Ultrastructure of striated muscle, Sliding filament theory of muscle contraction
4. Properties of muscles (Twitch, Tetanus, Tonus, Summation, All or None Principle, Muscle fatigue)

Unit-II : Excretion

1. Structure of uriniferous tubule
2. Mechanism of urine formation
3. Counter – current mechanism
4. Normal and abnormal constituents of urine; Elementary idea of dialysis

Unit-III : Endocrinology

1. Structure and functions of pituitary gland
2. Structure and functions of thyroid and parathyroid gland
3. Structure and functions of adrenal gland
4. Structure and functions of pineal gland

Unit-IV : Reproduction

1. Oestrous and menstrual cycle
2. Male and female sex hormones
3. Causes of infertility in male and female
4. Contraceptives– Mechanical and hormonal ;*In-vitro* fertilization

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Distribution of Marks **Total Marks 30**

I. Physiology experiment	05
II. Identification and comments on spots (Mammalian histology 3 spots)	03
III. Microtechnique - Section cutting, spreading and H-E staining of given slide	03
IV. Anatomical observation	05
V. Analysis of given biostatistical data	02
VI. Retrieval of specific literature from given information	02
VII. Submission of slides and study tour report	02
VIII. Submission of certified practical record	03
IX. Viva voce	05

List of Recommended Books: (For Semester V and VI)

Physiology

1. Human Physiology – Chatterjee A. G. vol. I & II
2. Medical Physiology – Gyton
3. T. B. of Animal Physiology – Berry
4. Introduction to Animal Physiology and Related Biotechnology – H. R. Singh
5. Animal Physilogy – Arora M.P.
6. General and Comparative Physiology – Hoar W. S.
7. T. B. of Animal Physiology – Hurkat and Mathur
8. Animal Physiology – Nahbhushan and kodarkar
9. T. B. of Animal Physiology & General Biology – Thakur &Puranik
10. General Endrocrinology – Turner Bagnaro
11. Reproduction and Human welfare – Greep and koblinsky
12. Animal Physiology – Shastri & Goel
13. Animal Physiology – Verma&Tyagi
14. Human Physiology - Vander and sheman
15. Applied Physiology – Keels, Neils and Joels
16. Animal Physiology – Rastogi S. C.
17. Animal Physiology – Veerbala Rastogi
18. Comparative Vertebrate Endocrinology – Beutley
19. T.Y B. Sc Zoology Sem-V- Dhamani,Bakare,Harney & Bhute

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Hymenoptera, Diptera etc. with the help of already available museum specimens, permanent slides/ ICT tools/ charts/ photographs/ models etc.

5 **Physiological Experiments:**

a. Estimation of total proteins/carbohydrates/lipids
b. Chromatographic separation of free amino acids
c. Separation of proteins by electrophoresis
d. Estimation of Na^+ and K^+ by flame photometer.
e. Estimation of DNA and RNA.

6 Visits to agricultural fields, national parks and forests for observations of insect population dynamics, behavior and diversity.

Note: Student should submit insect photographs of 10 locally available species at thetime of examination.

	Distribution of Marks	**Marks**
1.	Anatomical observations	10
2.	Physiological Experiment	10
3.	Identification of histological slides and insects (1-15)	30
4.	Mounting	05
5.	Class records and submission of insect photographs	10
6.	Submission of histological slides	05
7.	Viva-voce	10
	Total marks	80

Semester –III

Paper-X, Special Group-Fish and Fisheries -I **(CREDIT - 4)**

General studies

Unit-I

1.1 Origin and Evolution of fishes: Fossil record, classification, cyclostoms, ostracoderms, placoderms, Sharklike fisher, Bony fishes

1.2 Development of jaws and limbs in fishes.

1.3 Classification and general characters of Placoderms: Acanthodii, Coccostei, Pterychthyes, Stegoselachii, Palaeospondyli.

1.4 Affinities of Placoderms and fossil record.

Unit-II

2.1 Classification and general characters of Elasmobranch/Chondrichthyes: Sharks and Rays, Holocephali

2.2 Affinities of Elasmobranchs, specialized characters of Elasmobranchs.

2.3 Classification and general characters of Actinopterygii/Ray finned

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Unit-III

3.1 Insect pathogenic bacteria used in biological control programmes, biological relationship, mass production and examples.

3.2 Insect pathogenic viruses used in biological control programmes, biological relationship, mass production and examples

3.3 Use of radiation, chemosterilants, hormones and pheromones in pest control programmes.

3.4 Integrated pest managements: principles, modeling, application and examples.

Unit-IV

4.1 Pest of horse and cattle: Nature of damage, life cycle and control measures.

4.2 Mosquitoes causing disease in man: life cycle, mode of transmission of pathogen and control measures.

4.3 Flies causing disease in man: life cycle, mode of transmission of pathogen and control measures.

4.4 Lice and fleas causing disease in man: life cycle, mode of transmission of pathogen and control measures.

Semester-IV, Practical-VII, Special Group-Entomology

1 Anatomical observations, demonstration and detailed explanation of the silkgland in mulberry and non mulberry silkworms with the help of already available permanent slides/ ICT tools/ models/ charts/ photographs etc.

2 Anatomical observations, demonstration and detailed explanation of the male and female reproductive system in silk moths with the help of ICT tools/ models/ charts/ photographs etc.

3 Anatomical observations, demonstration and detailed explanation of the salivary, pharyngeal glands and sting apparatus in honey bees with the help of ICT tools/ models/ charts/ photographs etc.

4 Demonstration of disease causing pathogens in insects.

5 Histopathological Study of baculovirus and protozoan infected tissues with the help of already available permanent slides/ ICT tools/ models/ charts/ photographs etc.

6 Collection of insect photographs, identification and classification of harmful insects, parasitic hymenopteran and other beneficial insects.

7 Listing of insects of different orders of central India.

8 Study of various systems of insects and their functional significance with the help of ICT tools/ charts/ models/ photographs etc.

9 Preparation of photographic life history of economical important insects.

10 Preparation of insect biodiversity register of a specific area by photographic collection/ observation.

11 Visit to Apiculture, Sericulture, Lac culture centers and entomology research laboratory/center.

Distribution of Marks:		Marks
1.	Anatomical observations	10
2.	Identification, classification and economic importance of spots (1 to 10)	20
3.	Demonstration of microbial pathogen in insect	10
4.	Whole mount preparation	10
5.	Class record and submission of slides	10
6.	Submission of life history	10
7.	Viva-voce	10
	Total marks	80

- **Project work** 100

(80 marks project evaluation including viva + 20 marks Internal assessment)

- **Suggested Readings**

Entomology

1. Imms General text book of Entomology, Eds. O. W. Richards and R. G. Davis Chapman and Hall, London.
2. General and Applied Entomology, K.K. Nayar, T. N. Ananthkrishan and B.V. Davis Tata McGraw -Hill Co.Ltd. Bombay.
3. The Insect: Structure and function, R.F. Chapman, Cambridge University Press.
4. The Physiology of Insect , Ed. M.Rockstein ,Vol, 1-5, Academic Press, New York.
5. The Physiology of Insect Reproduction, F, Englemann, Pergamon Press, New York.
6. Comprehensive Insect Physiology , Biochemistry and Pharmocology , Eds. G.A. Kerkut and I. A. Gillberd, VOL. 1-13, Pergamon Press, New York.
7. Analytical Biochemistry of Insect, Ed. R. B. Turner, Elsevier, Amsterdam.
8. Insect Hormone, M. J. A. Novak. Chapman and Hall, London.
9. Modern Entomology(Second edition): D. B. Tembhare, Himalaya Publication House, Bombay.
10. Destruction and Useful Insect, Their Hanits and Control, C. L. Metcalf, W. P. Flint and R. I. Metcalf, Mc Grow I Ill Co. New York.
11. Integrated Pest Management, J.L. Apple and R. E. Smith, Plenum Publication Co., New Delhi.
12. An Introduction Of Biological Control RVD Boarscho, P. S. Y. Messenger and A. P. Gaiter, Plenum Publication Co.
13. Text Book of Entomology, K. P. Shivastava, Vol. 1 And 2 Kalyani Publication, Ludhiana.
14. Agriculture Entomology, H. S. Dennis, Timber Press Inc.
15. Entomology and Pest Management, Larry P. Pedigo, Prentice Hall.
16. Text Book of Agriculture Entomology, Alford V. David, Blackwell Science.
17. Biopesticides In Insect Pest Management, S. J. Ignacimulha and AlokSen , Phoenix Publishing House Pvt, Ltd.

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6 Study of histochemical localization of lipids in rat / mouse ovary by Sudan Black–B method (Propylene glycol method) with the help of already available permanent slides/ ICT tools/ charts/ models/ photographs etc.

7 Experimental (histological slides for identification) study of the following with the help of already available permanent slides/ ICT tools/ charts/ models/ photographs etc.
   a) Effects of ovarictomy and oestrogen replacement on pituitary, uterus and vagina.
   b) Effects of some female antifertility drugs on ovary and adrenal gland

8 Histology: (Identification of slides) Histological changes in female reproductive organs during different phases of oestrous cycle in continuous and seasonal breeder with the help of already available permanent slides/ ICT tools/ charts/ models/ photographs etc.

9 Embryology: Study of various stages of development of mammalian egg, development of foetal membranes, different types of placenta, progestational changes in uterus with the help of already available permanent slides/ ICT tools/ charts/ models / photographs etc.

10 Field work: Visit to laboratory for embryo transfer and family planning clinics.

Distribution of marks		**Marks**
1.	Surgical operation	15
2.	Anatomical observations	15
3.	Vaginal smear and oestrous cycle stages	10
4.	Experimental analysis	10
5.	Identification and comment on spots	10
6.	Practical Record	10
7.	Viva voce	10
	Total marks	80
•	**Project work**	100

(80 marks project evaluation including viva + 20 marks Internal assessment)

- **Suggested Readings**

1. A textbook of in vitro fertilization and assisted reproduction edited by P.R. Brinsden and P. A. RainsburJaypee brothers 1992.
2. Advances in Reproductive Physiology, Vol. 1 to 6: Mclaren, (1968). Logos Press Ltd., London.
3. Advances in Reproductive Toxicology eds. S. C. Joshi and A. S. Ansari Pointer publishers.
4. Andrology. 2nd Edition Male Reproductive health and dysfunction (Eds. E. Nieschlag& H.M. Behre) 2000.
5. Biochemistry of Mammalian Reproduction: Zanveld, L.J.D. & R.T. Chatterton (1982). John Wiley & sons, New York. The Ovary. Vol. I, II & III: Zuckerman, S, (1962). Academic Press, London.

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GONDWANA UNIVERSITY, GADCHIROLI

M.Sc.-II Semester III, IV (Chemistry)

(Effective from 2017-18) (CBCS)

1. There will be four theory papers in every semester which will carry 80 marks each of 3 hrs. duration.
2. In semester III student will opt for special paper from four options available.
3. In semester IV student will opt for an elective paper out of the five options available.
4. There will be internal assessment of 20 marks per paper per semester.
5. Each paper per semester with total of 100 marks(80+20 i.e. theory+internal assessment) will carry 4 credits.
6. The internal assessment will be based on Attendance, Home assignment, Unit test Terminal test and participation in departmental activities.
7. There will be two practical examinations in semester III i.e. Pract I(special) and Pract II(Elective) of 6-8 hours duration of 80 marks with 4 credits each.Every practical will be having 20 internal practical marks.
8. In semester IV there will be one practical (Special) and another as Project of 80 marks each.
9. In each semester, the student will have to deliver a seminar on any topic relevant to the syllabus / subject encompassing the recent trends and development in that field / subject. This will carry 25 marks per seminar with one credit.
10. So, the total marks allotted to the Chemistry subject per semester is 625 marks: Theory (320 marks) + Internal assessment (120 marks) + Practicals (160 Marks)+ Seminar (25Marks)= 625marks (total)
11. Each theory paper consists of four units of fifteen hours per unit.

The following syllabi are prescribed on the basis of four hours per week of each paper and nine practical periods per batch per week.

General scheme for distribution of marks in practical examination

Time : 6-8 h (One day Examination) Total Marks : 80)

Exercise-1 - 30 Marks

Exercise-2 - 20 Marks

Viva-Voce -15Marks

Record -15 Marks

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UNIT-III: 15 h

A) Histamines and Antihistamic agents: Introduction, histamine H1-receptor antagonists. Inhibitors ofhistamine release. Synthesis of: alkyl amines, phenothiazines, piperzines derivatives.

B) Antibiotics: Introduction, β-lactam antibiotics, classification, SAR and chemical degradation of penicillin,cephalosporins-classification , tetracycline antibiotics-SAR,miscellaneous antibiotics. Synthesis of ampicillin,cephradine, methacycline,chloramphenicol

UNIT-IV: 15 h

A) Anthelminitics and antiamoebic drugs: Introduction to Helminthiasis, Anthelminitics, drugs used incestode infection, drugs used in trematode infection, origin of antiamoebic drug, drugs used in nematodeinfection. Synthesis of: Clioquinol, Iodoquinol, Haloquinol, Dichlorphen, Niclosamide.

B) Anti-inflammatory drugs: Introduction, etiology of inflammatory diseases. The inflammatory response,biochemical response. Synthesis of: Phenyl butazone and its derivatives, pyrazolone derivatives, pyrole andindole acetic acid derivatives.

PSCChP11 Practical-XI Project

9 h/week 80 Marks

Project is a part of practical examination. Project should be carried out by the student under the supervision of Guide/Teacher. The examination shall be conducted by External and Internal Examiners. Students are supposed to present their work either on LCD Projector / OHP or blackboard.

The division of marks will be as follows:

External examiner: 40 marks

Internal examiner (Guide/ Teacher): 40 marks

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Table 1: M.Sc. Semester II

Sr No	Course Category	Name of the course(Title of the Paper)	Level	Teaching Scheme (hrs)			Total Credit	Evaluation Scheme			
				Theory	Tutorial	Practical		Duration of Examination (Hrs)	End Semester Evaluation(ESE)	Continuous Internal Evaluation (CIE)	Minimum Passing Marks
				Th	Tu	P					
1	DSC	Paper 1:- Structure and Function of Vertebrates (02MSCZO01)	6.0	4	--	--	3	3	80	20	40
		Paper 2: Comparative Endocrinology- (02MSCZO02)		4	--	--	3	3	80	20	40
		Paper 3 Molecular Biology and Biotechnology: (02MSCZO03)		4	--	--	3	3	80	20	40
2	DSE Elective	Paper 1:- Biology of Parasites Paper 2:- Aquaculture and Management Paper 3:- Applied Entomology Paper 4:- General and Applied Ichthyology Paper 5:- Economic Zoology (02MSCZO04)		4	--	--	3	3	80	20	40
3	OJT / FP	Industrial Training/Survey/ Research Project (02MSCZO05)		4	--	--	4	5	80	20	50
4	Lab-I	Practical Basis On (C1+ C2)		--	--	4	2	5	80	20	50
5	Lab-I	Practical Basis On (C3+ EL)		--	--	4	2	5	80	20	50
6		Seminar		---	--		--	--	--	50	20
				20	--	8	20		550	200	--

Cumulative Credits for : PG Degree in Major Subject Core = 09, Practicals = 04, Electives = 03 OJT / FP= 4 Total = 20 Credits (Sem-1: 20 + Sem-2: 20 = 40 Credits

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Reference Book

1. Dr. Praful B. Godkar,Text Books of Medical Laboratory Technology
2. Anathanarayana & Panikar – A Text Book of Medical Microbiology
3. Monica Cheesbrough, District Laboratory Practice in Tropical countries –Partl & Part II
4. . Vasudevan & Shreekumar : Biochemistry for Medical students
6. K.Laxminarayan : Histological techniques
8. Dr. Mukherjee, Medical Laboratory Technology, Volume I , II & II
9. J G College et al, Mackie & Mc Cartney Practical Medical Microbiology, 14th Edn, 1996, London, Churchill Livingstone.
10. Silvertone : Introduction to Medical Lab. Technology
11. Manual for Clinical Pathology by Sabitry Sanyal
12. Chatterjee , KD – Parasitology
13. Bancroft, Cellular Pathology Technique
14. 15. Mamuel Baron, Medical Microbiology, 3rd Ed
16. Clinical Lab Management by Williams & Wilkins

Practical's

1. Estimation of biochemical parameters using Auto-analizer, Semi-autoanalyzer
2. Scanning of absorption spectra of any amino acid on double beam spectrophotometer
3. Determination of Na+ & K+ in blood serum using flame photometer
4. Determination of pH of blood and arterial blood gas analysis.
5. Estimation of various minerals using Atomic absorption spectrophotometer (AAS)
6. Estimation of various hormones, tumor markers by using Chemiluminescence (CLIA) AND ELISA method.
6. Extraction of glycogen and its estimation
7. Extraction of protein and its estimation
8. Extraction of lipids and estimation of total lipids, glycolipid, phospholipids and cholesterol.
9. Visit to Pathology Laboratory either Government or Private for collecting the information of any diseases or disorders and submit a project report.

Marks Distribution for Practical:

1. Major Experiment	15
2. Minor Experiment	10
3. Project Report	07
4. Class record	05
5. Viva-Voce	03
Total Marks	40

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8. Qualitative analysis of Zooplankton and Phytoplankton
9. Quantitative analysis of Zooplankton and Phytoplankton
10. Study of benthic fauna of freshwater bodies
11. Study of natural fish food
12. Preparation of artificial fish food
13. Types of earthworm
14. Preparation of Vermicomposte and vermiwash
13. Field Visit - Visit to Fresh water fish farm or CIFA

Marks Distribution for Practical:

1. Major Experiment (Qualitative/Quantitative analysis of Plankton)	10
2. Minor Experiment (10 to 12)	05
3. Identification of Spotting (A to J)	10
4. Class record	05
5. Submission of Field visit Diary and slides	07
6. Viva-Voce	03
Total Marks	**40**

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8. Qualitative analysis of Zooplankton and Phytoplankton
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2. Minor Experiment (10 to 12)	05
3. Identification of Spotting (A to J)	10
4. Class record	05
5. Submission of Field visit Diary and slides	07
6. Viva-Voce	03
Total Marks	**40**

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Basket for the 2 year PG Program (M.Sc. Mathematics) under NEP-2020

	Sem - I	Sem - II
Major (DSC)	• Advanced Abstract Algebra • Topology • Linear Algebra	• Field theory • Measure theory • Classical Mechanics
Major Elective (DSE)	• Numerical Analysis • Real Analysis • Ordinary differential Equations • Calculus of Variations • Number Theory • SCILAB Programming • Fuzzy Mathematics • Logic and Set Theory • Elementary Discrete Mathematics	• Operations Research • Differential Geometry • Combinatorics • Graph Theory • Coding Theory • Cryptography • Advanced Topics in Topology • Statistics and Probability • C Programming • Financial Mathematics
Research Methodology/OJT/ Field Project	Research Methodology	OJT/Field Project

Note:

1. Students need to do OJT/Field Project as per NEP guidelines and mentors shall be designated by department/colleges for internship/OJT.
2. Maximum 10 students per teacher shall be allocated for mentorship of OJT/Field Project.
3. The students must complete on-the-job training/internship of 04 credits during summer break, after completion of the second semester of the first year in the respective Major Subject.
4. The assessment of OJT/FP shall be conducted by the Department.
5. Teachers may use software's, if required for teaching contents of a course.
6. SCILAB Programming and C Programming are 4 credit courses, where 2 Theory and 2 practicals per week shall be devoted to them.
7. Term end Theory examination of 80 marks and 20 marks internal assessment shall be conducted for those courses which have theory and practical components.

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Semester I for M.Sc. Program in Mathematics

Course	Teaching Scheme (Hours/ Week)			Credits			Examination Scheme				
	Theory	Practical	Total	Theory	Practical	Total	Duration in Hrs.	Maximum Marks			Minimun Passing marks
								External assessment Theory	Internal assessment	Total Marks	External assessment + Internal assessment
Major (DSC) 1	4	--	4	4	--	4	3	80	20	100	40
Major (DSC) 2	4	--	4	4	--	4	3	80	20	100	40
Major (DSC) 3	4	--	4	4	--	4	3	80	20	100	40
Elective (DSE)	4	--	4	4	--	4	3	80	20	100	40
Research Methodology	4	--	4	4	--	4	3	80	20	100	40

Semester II for M.Sc. Program in Mathematics

Course	Teaching Scheme (Hours/ Week)			Credits			Examination Scheme				
	Theory	Practical	Total	Theory	Practical	Total	Duration in Hrs.	Maximum Marks			Minimun Passing marks
								External assessment Theory	Internal assessment	Total Marks	External assessment + Internal assessment
Major (DSC) 1	4	--	4	4	--	4	3	80	20	100	40
Major (DSC) 2	4	--	4	4	--	4	3	80	20	100	40
Major (DSC) 3	4	--	4	4	--	4	3	80	20	100	40
Elective (DSE)	4	--	4	4	--	4	3	80	20	100	40
On Job Training /Field Project (OJT/ FP)	4	--	4	4	--	4	3	80	20	100	40

Guidelines about Internal Assessment for Semester I and II:

The internal assessment marks shall be awarded by the concerned teacher. The internal assessment marks shall be sent to the University.

In case, the candidate fails in Theory Examination, the Internal Assessment marks will be carried forward for his next supplementary Examination.

There shall be no separate / extra allotment of work load to the teacher concerned. He/ She shall conduct the internal assessment activity during the regular teaching days / periods as a part of regular teaching activity.

The concerned teacher / department / college shall have to keep the record of all the internal assessment activities until six months after the declaration of the results of that semester.

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2 year PG Program structure under NEP-20 to be implemented from Academic year 2023-24

	Sem - I	Sem - II
Major (DSC) 4 credits per course	4 x 3	4 x 3
Major Elective (DSE) 4 credits per course	4 x 1	4 x 1
Research Methodology/ OJT/Field Project 4 credits per course	4 x 1	4 x 1
Total Credits	**20**	**20**

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Gondwana University, Gadchiroli

Master of Arts (NEP 2020)

M.A History

Examination Scheme

SEMESTER – II

	Major Papers		Examinations Scheme		Internal Assessment	Total	
			Marks	Credits	Marks	Marks	Credits
Major (DSC) Paper – I (Mandatory)	Trends and Theories in History	Full Marks	80	04	20	100	04
		Pass Marks	32		08	40	
Major (DSC) Paper – II (Mandatory)	India Under British Rule : 1857-1905	Full Marks	80	04	20	100	04
		Pass Marks	32		08	40	
Major (DSC) Paper – III(Mandatory)	Contemporary World :1950-2000	Full Marks	80	04	20	100	04
		Pass Marks	32		08	40	
Major (DSE) Elective Paper – IV	Independent India: 1947-2000	Full Marks	80	04	20	100	04
		Pass Marks	32		08	40	
	State, Society and Culture of India 300 B.C.-500 A.D.	Full Marks	80	04	20	100	04
		Pass Marks	32		08	40	
	Society Economy and Culture Under the Sultans	Full Marks	80	04	20	100	04
		Pass Marks	32		08	40	
	Society Economy and Culture Under the Mughals	Full Marks	80	04	20	100	04
		Pass Marks	32		08	40	
	History of Art and Architecture in India: Medieval Period	Full Marks	80	04	20	100	04
		Pass Marks	32		08	40	
	Nineteenth Century Maharashtra	Full Marks	80	04	20	100	04
		Pass Marks	32		08	40	
Minor (OJT) / Field Work – V		Full Marks	80	04	20	100	04
		Pass Marks	32		08	40	
Total		Full Marks	400	20	100	500	20
		Pass Marks	160		40	200	

Dr. L.S. Ladke
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Syllabus
Gondwana University, Gadchiroli
History
P.G. Program
Sem – II
Major (DSC)- Four (4) Credit
Trends and Theories of History

Theory Mark:80 Code S2 MAHIS 01 Internal Assessment marks: 20
Total Marks:-100

Course Outcome

1.Historiographical literacy. -Students will be able to identify and describe the contours and stakes of conversation among historians within defined historiographical fields.

2. Students will understand philosophical base of History.

3.Students will be able to explain and critique the historical schools of thought that have shaped scholarly understanding of their fields of study.

Unit 1

a. Orientalist History Writing – William Jones, James Princep

b. Imperialist History Writing – J.S.Mill , William Hunter

c. Nationalist History Writing – K.P.Jayaswal, Mohammad Habib

Unit 2

a. Marxist History Writing – R.S.Sharma, D.D.Kosambi

b. Subaltern – Ranjit Guha, Sumit Sarkar

c. Post- Modern – Jean Lyotard,Frederick Jamseon

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Gondwana University, Gadchiroli

New Education Policy Syllabus 2023

FYPGP -History

M.A. Sem I

Major (DSC)- Four (4) Credit

1.Historiography

2.India Under Company's Rule: 1757-1856

3. Modern World: 1914 to 1950

Major Elective (DSE)- Four (4) Credit

1. Indian National Movement: 1905 – 1947
2. India under the Sultanate Period
3. India Under the Mughals
4. History of India up TO 300 B.C.
5. History of Art and Architecture in India: Ancient Period
6. Socio-Religious Movements in Maharashtra, 1200 To 1700 A.D

Minor (RM)- Four (4) Credit

1. RESEARCH METHODOLOGY IN HISTORY

M.A. Sem – II

Major (DSC)- Four (4) Credit

1. Trends and Theories of History
2. India under British Rule: 1857 – 1905
3. Contemporary World: 1950 to 2000

Major Elective (DSE)- Four (4) Credit

1. Independent India: 1947-2000
2. State, Society and Culture of India, 300 B.C.–500 A.D.
3. Society, Economy and Culture Under the Sultans

4. Society, Economy and Culture Under the Mughals

5. History of Art and Architecture in India: Medieval Period

6.Nineteenth Century Maharashtra

OJT (On Job Training) - Four (4) Credit

Ladke

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Gondwana University, Gadchiroli

Master of Arts (NEP 2020)

M.A History

Examination Scheme

SEMESTER – II

	Major Papers		Examinations Scheme		Internal Assessment	Total	
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		Pass Marks	32		08	40	
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