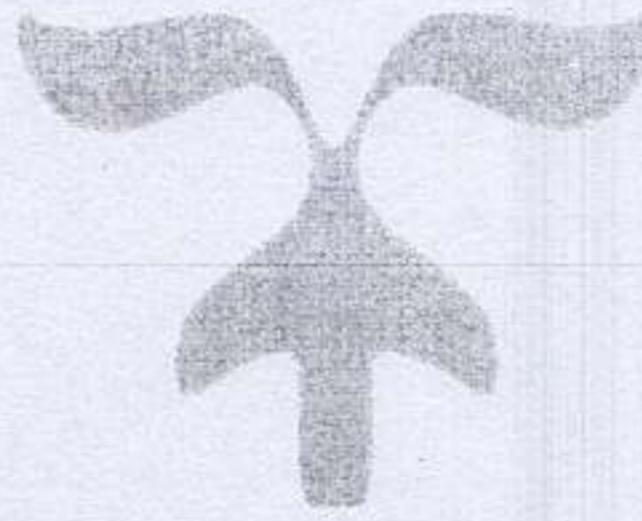




DEPARTMENT OF AGRICULTURE

SYLLABUS APPROVED BY BOARD OF STUDIES

B. Sc. AGRICULTURE



I – Semester

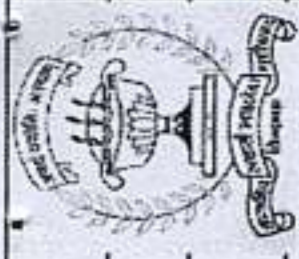


2024-2025

**PRADHAN MANTRI COLLEGE OF EXCELLENCE
GOVERNMENT AUTONOMOUS POST GRADUATE COLLEGE,
CHHINDWARA (M.P.)**



प्रधान मंत्री कॉलेज ऑफ़ एक्सीलेंस, शासकिय स्नातकोत्तर महाविद्यालय छिन्दवाड़ा



DEGREE PROGRAM B.Sc. (Hons.) Agriculture

SEMESTER - I

Session -2024-25

S.NO	COURSE CODE	Course Name	EVALUATION SCHEME										SUB TOTAL CREDITS	SUB TOTAL MARKS		
			THEORY					PRACTICAL								
			End Sem Exam	Mid Term Exam	Teachers Assessment*	End Sem University Exam	Teachers Assessment*	Th(credit)	P (credit)	Th(credit)	End Sem University Exam	Teachers Assessment*				
		A: Compulsory Course														
1	BAG101	Fundamentals of Horticulture	50	30	0	15	5	1	1	1	2	100				
2	BAG102	Fundamentals of Plant Biochemistry and Biotechnology	50	30	0	15	5	2	1	1	3	100				
3	BAG103	Fundamentals of Soil Science	50	30	0	15	5	2	1	1	3	100				
4	BAG104	Introduction to Forestry	50	30	0	15	5	1	1	1	2	100				
5	BAG105	Comprehension & Communication Skills in English	50	30	0	15	5	1	1	1	2	100				
6	BAG106	Fundamentals of Agronomy	50	30	0	15	5	3	1	1	4	100				
7	BAG107	Rural Sociology & Educational Psychology	50	40	10	0	0	2	0	0	2	100				
		B: Remedial course									18	700				
8	BAG108	Introductory Biology* (FOR MATHS IN 12 TH)	50	30	0	15	5	1	1	1	2	100				
9	BAG109	Agricultural Heritage*	50	40	10	0	0	1	0	0	1	100				
10	BAG110	Elementary mathematics * (FOR BIO IN 12 TH)	50	40	10	0	0	2	0	0	2	100				
		C: Non -Gradial Course									3//5	200/300				
11	BAG111	Human Values & Ethics **	50	40	10	0	0	1	0	0	1	100				
12	BAG112	NSS/NCC/Physical Education & Yoga Practices**	0	0	0	60	40	0	2	2	2	100				
		GRAND TOTAL (A+B+C)									3	200				
		GRAND TOTAL (A+B+C)									24/26	1100/1200				
	Abbreviatio	Th- THEORY LECTURE	*					Remedial course								
		P- PRACTICALS	**					Non- Gradial								
		MST- MID SEM TEST														

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Chairperson - Board of Studies,

Faculty of Agriculture,

Controller of Examination,

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PRADHAN MANTRI COLLEGE OF EXCELLENCE GOVERNMENT AUTONOMOUS POST GRADUATE COLLEGE, CHHINDWARA (M.P.)



BAGT101: FUNDAMENTALS OF HORTICULTURE: 101

Unit-1 Horticulture – Its definition and branches, importance and scope; horticultural and botanical classifications, Climate and soil for horticultural crops.

Unit-2 Plant Propagation- methods and propagating structures, Seed dormancy, Seed germination, principles of orchard establishment.

Unit-3 Principles and methods of training and pruning, juvenility and flower bud differentiation

Unit-4 Unfruitfulness pollination, pollinizers and pollinators; fertilization and Parthenocarpy; medicinal and aromatic plants; importance of plant bio-regulators in horticulture.

Unit-5 Irrigation –methods, Fertilizer application in horticultural crops.

BAGP 101: Practical

Identification of garden tools. Identification of horticultural crops.

Preparation of seedbed /nursery bed. Practice of sexual and asexual methods of propagation including micropropagation.

Layout and planting of orchard. Training and pruning fruit trees.

Preparation of potting mixture. Fertilizers application in different crops.

Visit to commercial nurseries/ orchard

Books: 1. Introduction to Horticulture, Dr. N. Kumar, Rajya lakshmi publications (2017).

2. Fundamentals to Horticulture, Jitendra Singh, Kalyani Publishers (2018).

References

The Fundamental of Horticulture: Chris Bird Cambridge University Press

Principles of Horticulture: Charles Adams Routledge

Introduction to Horticulture: Dr. N. Kumar Oxford & IBH Publisher

Intoductory Horticulture: E.P. Christopher Biotech Books, New Delhi

Basic Horticulture: Jitendra Singh Kalyani Publisher

Handbook of Horticulture: U.S. Bose Oxford Book Company

Plant Propagation and Nursery Management: R.R. Sharma, M. Srivastva International Book Distributing Company, Lucknow

Udhyan Vigyan: S.S. Srivastava

Fundamental of Horticulture: J.B. Edomond, T.L. Senn and F.S. Andrews Tata Mac-Graw Hill Publishing Company New, Delhi



PRADHAN MANTRI COLLEGE OF EXCELLENCE GOVERNMENT AUTONOMOUS POST GRADUATE COLLEGE, CHHINDWARA (M.P.)



BAGT:102 FUNDAMENTALS OF PLANT BIOCHEMISTRY AND BIOTECHNOLOGY :

Unit-1: Importance of Biochemistry. Properties of Water, pH and Buffer. Carbohydrate: Importance and classification. Structures of Monosaccharides, Reducing and oxidizing properties of Monosaccharide, Mutarotation; Structure of Disaccharides and Poly saccharides. Lipid: Importance and classification; Structures and properties of fatty acids; storage lipids and membrane lipids.

Unit-2: Proteins: Importance of proteins and classification; Structures, titration and zwitterions nature of amino acids; Structural organization of proteins. Enzymes: General properties; Classification; Mechanism of action; Michaelis & Menten and Line Weaver Burk equation & plots; Introduction to allosteric enzymes.

Unit-3 Nucleic acids: Importance and classification; Structure of Nucleotides, A, B & Z DNA; RNA: Types and Secondary & Tertiary structure. Metabolism of carbohydrates: Glycolysis, TCA cycle, Glyoxylate cycle, Electron transport chain. Metabolism of lipids: Beta oxidation, Biosynthesis of fatty acids.

Unit-4 Concepts and applications of plant biotechnology: Scope, organ culture, embryo culture, cell suspension culture, callus culture, anther culture, pollen culture and ovule culture and their applications; Micro-propagation methods; organogenesis and embryogenesis, Synthetic seeds and their significance; Embryo rescue and its significance; somatic hybridization and cybrids; Somaclonal variation and its use in crop improvement; cryo-preservation.

Unit-5 Introduction to recombinant DNA methods: physical (Gene gun method), chemical (PEG mediated) and Agrobacterium mediated gene transfer methods; Transgenic and its importance in crop improvement; PCR techniques and its applications; RFLP, RAPD, SSR; Marker Assisted Breeding in crop improvement; Biotechnology regulations.

BAGP 102: Practical

Preparation of solution, pH & buffers, Qualitative tests of carbohydrates and amino acids. Quantitative estimation of glucose/ proteins. Titration methods for estimation of amino acids/lipids, Effect of pH, temperature and substrate concentration on enzyme action, Paper chromatography/ TLC demonstration for separation of amino acids/ Monosaccharides. Sterilization techniques. Composition of various tissue culture media and preparation of stock solutions for MS nutrient medium. Callus induction from various explants. Micro-propagation, hardening and acclimatization. Demonstration on isolation of DNA. Demonstration of gel electrophoresis techniques and DNA finger printing

- Books:** 1. Indian society of soil science (ISSS) .Fundamentals of soil science. ICAR Publication, New Delhi.
2. Brady, N. C. & Well, R. R. (). The Nature and Properties of soil. Macmillan 15th edition.
3. A.K. Saha. A Text Book of soil Physics. Kalyani Publication, New Delhi

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PRADHAN MANTRI COLLEGE OF EXCELLENCE GOVERNMENT AUTONOMOUS POST GRADUATE COLLEGE, CHHINDWARA (M.P.)



BAGT 103: Fundamentals of soil science : 103

Unit-1: Soil as a natural body, Pedological and edaphological concepts of soil; Soil genesis: soil forming rocks and minerals; weathering, processes and factors of soil formation; Soil profile, components of soil; Soil physical properties: soil-texture, structure, density and porosity, soil colour, consistence and plasticity.

Unit-2: Elementary knowledge of soil taxonomy classification and soils of India; Soil water retention, movement and availability; Soil air, composition, gaseous exchange, problem and plant growth, Soil temperature; source, amount and flow of heat in soil; effect on plant growth.

Unit-3 Soil reaction –pH, soil acidity and alkalinity, buffering, effect of pH on nutrient availability; soil colloids – inorganic and organic; silicate clays: constitution and properties; sources of charge; ion exchange, cation exchange capacity, base saturation;

Unit-4 Soil organic matter: composition, properties and its influence on soil properties; humic substances – nature and properties; soil organism: macro and microorganisms, their beneficial and harmful effects.

Unit-5 Soil pollution –behaviour of pesticides and inorganic contaminants, prevention and mitigation of soil pollution.

BAGP 103:Practical

Study of soil profile in field. Study of soil sampling tools, collection of representative soil sample, its processing and storage.

Study of soil forming rocks and minerals. Determination of soil density, moisture content and porosity. Determination of soil texture by feel and Bouyoucos Methods.

Studies of capillary rise phenomenon of water in soil column and water movement in soil.

Determination of soil pH and electrical conductivity.

Determination of cation exchange capacity of soil. Study of soil map.

Determination of soil colour.

Demonstration of heat transfer in soil. Estimation of organic matter content of soil.

Books: 1. Indian society of soil science (ISSS) .Fundamentals of soil science. ICAR Publication, New Delhi.

2. Brady, N. C. & Well, R. R. (). The Nature and Properties of soil. Macmillan 15th edition.

3. A.K. Saha. A Text Book of soil Physics. Kalyani Publication, New Delhi.



PRADHAN MANTRI COLLEGE OF EXCELLENCE GOVERNMENT AUTONOMOUS POST GRADUATE COLLEGE, CHHINDWARA (M.P.)



BSAT 104: INTRODUCTION TO FORESTRY (NEW)

Unit-1: Introduction – definitions of basic terms related to forestry, objectives of silviculture, forest classification, and salient features of Indian Forest Policies.

Unit-2: Forest regeneration, Natural regeneration - natural regeneration from seed and vegetative parts, coppicing, pollarding, root suckers; Artificial regeneration – objectives, choice between natural and artificial regeneration, essential preliminary considerations.

Unit-3 Crown classification. Tending operations – weeding, cleaning, thinning – mechanical, ordinary, crown and advance thinning.

Unit-4 Forest mensuration – objectives, diameter measurement, instruments used in diameter measurement; Non instrumental methods of height measurement - shadow and single pole method; Instrumental methods of height measurement-geometric and trigonometric principles, instruments used in height measurement; tree stem form, form factor, form quotient, measurement of volume of felled and standing trees, age determination of trees.

Unit-5 Agroforestry – definitions, importance, criteria of selection of trees in agroforestry, different agroforestry systems prevalent in the country, shifting cultivation, taungya, alley cropping, wind breaks and shelter belts, home gardens. Cultivation practices of two important fast growing tree species of the region.

BAGP 104 Practical:

Identification of tree-species. Diameter measurements using calipers and tape, diameter measurements of forked, buttressed, fluted and leaning trees.

Height measurement of standing trees by shadow method, single pole method and hypsometer.

Volume measurement of logs using various formulae.

Nursery lay out, seed sowing, vegetative propagation techniques.

Forest plantations and their management. Visits of nearby forest based industries.

Books:

1. Dwivedi, A.P. 1980. Forestry in India, Jugal Kishore and Company, DehraDun
2. Negi, S.S. 1999. Agroforestry hand book, International book distributor, DehraDun.
3. Ram Prakash and Drake Hocking. 1986. some favourite trees for fuel and fodder, International book distributor, Dehradun.
4. Singh, S.P. 2009. Tree farming. Agrotech Publishing academy, Udaipur.
5. Singh, S.P. 2010. Favourite Agroforestry trees, Agrotech Publishing academy, Udaipur.

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PRADHAN MANTRI COLLEGE OF EXCELLENCE
GOVERNMENT AUTONOMOUS POST GRADUATE COLLEGE,
CHHINDWARA (M.P.)



BAGT 105: COMPREHENSION AND COMMUNICATION SKILLS IN ENGLISH

Unit-1: War minus Shooting- The sporting Spirit. A Dilemma- A layman looks at science Raymond B. Fosdick.
You and Your English – Spoken English and broken English G.B. Shaw.

Unit-2: Reading Comprehension, Vocabulary- Antonym, Synonym, Homophones, Homonyms, often confused words.

Unit-3 Exercises to help the students with enrichment of vocabulary based on TOEFL and other competitive examinations.

Unit-4 Functional grammar: Articles, Prepositions, Verb, Subject verb Agreement, Transformation, Synthesis, Direct and Indirect Narration.

Unit-5 Written Skills: Paragraph writing, Precise writing, Report writing and Proposal writing. The Style: Importance of professional writing. Preparation of Curriculum Vitae and Job applications. Synopsis Writing. Interviews: kinds, Importance and process.

Practical:

BAGP: 105

Listening Comprehension: Listening to short talks lectures, speeches (scientific, commercial and general in nature).

Oral Communication: Phonetics, stress and intonation, Conversation practice.

Conversation: rate of speech, clarity of voice, speaking and Listening, politeness & Reading skills: reading dialogues, rapid reading, intensive reading, improving reading skills.

Mock Interviews: testing initiative, team spirit, leadership, intellectual ability. Group Discussions.

Books: 1. Sanjay Kumar, Pushp Lata, Communication Skills, Oxford higher education

2. Ranjan Barman, Communication English, A Universal Exercise book Publisher : Ranjan Barman ;1 edition (2016)



PRADHAN MANTRI COLLEGE OF EXCELLENCE GOVERNMENT AUTONOMOUS POST GRADUATE COLLEGE, CHHINDWARA (M.P.)



BAGT 106: Fundamentals of Agronomy

Unit-1 Agronomy and its scope, seeds and sowing, tillage and tith, crop density and geometry, Crop nutrition, manures and fertilizers, nutrient use efficiency

Unit-2 Water resource, soil plant water relationship, crop water requirement, water use efficiency, irrigation – scheduling criteria and methods, quality of irrigation water, logging

Unit-3 Weeds –importance, classification, and crop weed competition, concepts of weed management–principles and methods, herbicides–classification, selectivity and resistance.

Unit-4 Growth and development of crops, factors affecting growth and development, plant ideotypes, crop rotation and its principles, adaptation and distribution of crops.

Unit-5 Crop management technologies in problematic areas, harvesting and threshing of crops. Allelopathy.

BAGP 106: Practical

Identification of crops, seeds, fertilizers, pesticides and tillage implements, study of agro-climatic zones of India, Identification of weeds in crops, Methods of herbicides and fertilizer application, Study of yield contributing characters and yield estimation, seed germination and viability test, Numerical exercises on fertilizers requirement, plant population, herbicides and water requirement, Use of tillage implements – reversible plough, one way plough, harrow, leveler, seed drill, Study of soil moisture measuring device, Measurement of field capacity, bulk density and infiltration rate, Measurement of irrigation water.

Books:

1. Principles of Agronomy – S. R. Reddy (1999) Kalyani Publication, New Delhi
2. Handbook of Agriculture (2006) ICAR Publications
3. Introduction to Agronomy and soil and water Management – V. G. Vaidya and K. K. Sahatrabudhe

BAGT 107: RURAL SOCIOLOGY & EDUCATIONAL PSYCHOLOGY

Unit-1: Sociology and Rural sociology: Definition and scope, its significance in agriculture extension

Unit-2: Social Ecology, Rural society, Social Groups,

Unit-3 Social Stratification, Culture concept, Social Institution, Social Change & Development.

Unit-4 Educational psychology: Meaning & its importance in agriculture extension.

Unit-5 Behavior: Cognitive, affective, psychomotor domain, Personality, Learning, Motivation, Theories of Motivation, Intelligence.

Books: 1. M. S. Randhawa (). A History of agriculture in India. ICAR New Delhi.

2. Sagar Mondal (). A text book of rural development. Kalyani publisher.

3. B.D. Tyagi (). Fundamental of rural sociology. Rama Publisher

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PRADHAN MANTRI COLLEGE OF EXCELLENCE GOVERNMENT AUTONOMOUS POST GRADUATE COLLEGE, CHHINDWARA (M.P.)



BAGT 108: INTRODUCTORY BIOLOGY (for math's in 12th students)

Unit-1: Introduction to the living world, diversity and characteristics of life, origin of life, Evolution and Eugenics.

Unit-2: Binomial nomenclature and classification Cell and cell division.

Unit-3 Morphology of flowering plants. Seed and seed germination.

Unit-4 Plant systematic- viz., Brassicaceae, Fabaceae and Poaceae.

Unit-5 Role of animals in agriculture.

BAGP 108: Practical

Morphology of flowering plants – root, stem and leaf and their modifications. Inflorescence, flower and fruits. Cell, tissues & cell division. Internal structure of root, stem and leaf. Study of specimens and slides. Description of plants - Brassicaceae, Fabaceae and Poaceae.

Books:

1. Paper back ,Mader Sylvia S. ,Biology, McGraw-Hill Education – Europe, ISBN 9780071107808
2. Paper back ,Mader Sylvia S., Essentials of Biology, McGraw-Hill Education – Europe, ISBN 9781259921773

BAGT 109: Agricultural Heritage

Unit-1: Introduction of Indian agricultural heritage; Ancient agricultural practices, Relevance of heritage to present day agriculture; past and present status of agriculture and farmers in society

Unit-2: Journey of Indian agriculture and its development from past to modern era; Plant production and protection through indigenous traditional knowledge; Crop voyage in India and world

Unit-3 Agriculture scope; Importance of agriculture and agricultural resources available in India;

Unit-4 Crop significance and classifications; National agriculture setup in India; Current scenario of Indian agriculture

Unit-5 Indian agricultural concerns and future prospects.

Books:

1. Choudary S.L., Sharma, G.S. and Nene, Y.L. (eds). Ancient and Medieval History of Indian Agriculture and its relevance to sustainable agriculture in the 21st century; Proceedings of the summer school held from 28 May to 17 June 1999. Rajasthan College of Agriculture, Udaipur 313001.
2. Nene Y.L. (ed.) 2005. Agricultural Heritage of Asia. Proceedings of the International conference, 6-8 December 2004, Asian-Agri History Foundation, Secunderabad- 500 009, Andhra Pradesh, India.
3. Nene, Y.L. 2007. Glimpses of Agricultural Heritage of India. Asian-Agri History Foundation, 47 ICRISAT Colony-1, Brig. Syed Road, Secunderabad- 5000 009, AP, India 901 pp. ISBN-81-903963-0-7.

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PRADHAN MANTRI COLLEGE OF EXCELLENCE GOVERNMENT AUTONOMOUS POST GRADUATE COLLEGE, CHHINDWARA (M.P.)



BAGT 110: ELEMENTARY MATHEMATICS (for Bio in 12th students)

Unit-1: Straight lines: Distance formula, section formula (internal and external division), Change of axes (only origin changed), Equation of co-ordinate axes, Equation of lines parallel to axes, Slope-intercept form of equation of line, Slope-point form of equation of line, Two point form of equation of line, Intercept form of equation of line, Normal form of equation of line, General form of equation of line, Point of intersection of two St. lines. Angles between two St. Lines, Parallel lines, Perpendicular lines, Angle of bisectors between two lines, Area of triangle and quadrilateral

Unit-2: Circle: Equation of circle whose Centre and radius is known, General equation of a circle, Equation of circle passing through three given points, Equation of circle whose diameters is line joining two points (x_1, y_1) & (x_2, y_2) , Tangent and Normal to a given circle at given point (Simple problems), Condition of tangency of a line $y = mx + c$ to the given circle $x^2 + y^2 = a^2$.

Unit-3 Differential Calculus: Definition of function, limit and continuity, Simple problems on limit, Simple problems on continuity, Differentiation of x^n , e^x , $\sin x$ & $\cos x$ from first principle, Derivatives of sum, difference, product and quotient of two functions, Differentiation of functions of functions (Simple problem based on it), Logarithmic differentiation (Simple problem based on it), Differentiation by substitution method and simple problems based on it, Differentiation of Inverse Trigonometric functions. Maxima and Minima of the functions of the form $y=f(x)$ (Simple problems based on it).

Unit-4 Integral Calculus: Integration of simple functions, Integration of Product of two functions, Integration by substitution method, Definite Integral (simple problems based on it), Area under simple well-known curves (simple problems based on it).

Unit-5 Matrices and Determinants: Definition of Matrices, Addition, Subtraction, Multiplication, Transpose and Inverse up to 3rd order, Properties of determinants up to 3rd order and their evaluation

Books:

1. MVSL DN Raju and Dr.K.V.Ramana- Engineering Mathematics-1
2. MVSL DN Raju and Dr.K.V.Ramana- Engineering Mathematics-2
3. Textbook for A.P Intermediate Mathematics-Paper (I A & IIB)
4. MVSL DN Raju and K.V.Ramana-Agricultural Mathematics .

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PRADHAN MANTRI COLLEGE OF EXCELLENCE GOVERNMENT AUTONOMOUS POST GRADUATE COLLEGE, CHHINDWARA (M.P.)



BAGT 111: HUMAN VALUE AND ETHICS

Unit-1: Values and Ethics-An Introduction. Goal and Mission of Life.

Unit-2: Vision of Life. Principles and Philosophy. Self Exploration.

Unit-3 Self Awareness. Self Satisfaction. Decision Making. Motivation. Sensitivity. Success.

Unit-4 Selfless Service. Case Study of Ethical Lives. Positive Spirit. Body, Mind and Soul.

Unit-5 Attachment and Detachment. Spirituality Quotient. Examination.

Books: 1. M. Govindarajan, S. Natarajan, V. S. Senthikumar, Professional Ethics and Human Values, Prentice Hall India Learning Private Limited (2013)

BAGT 112: PHYSICAL EDUCATION AND YOGA PRACTICES

Unit: 1

1. Teaching of skills of Football – demonstration, practice of the skills, correction, involvement in game situation (For girls teaching of Tennikoit)
3. Teaching of advance skills of Football – involvement of all the skills in game situation with teaching of rules of the game
4. Teaching of skills of Basketball – demonstration, practice of the skills, correction of skills, involvement in game situation
5. Teaching of skills of Basketball – demonstration, practice of the skills, involvement in game situation
6. Teaching of skills of Basketball – involvement of all the skills in game situation with teaching of rule of the game
7. Teaching of skills of Kabaddi – demonstration, practice of the skills, correction of skills, involvement in game situation
9. Teaching of advance skills of Kabaddi – involvement of all the skills in game situation with teaching of rule of the game
10. Teaching of skills of Ball Badminton – demonstration, practice of the skills, correction of skills, involvement in game situation
11. Teaching of skills of Ball Badminton – involvement of all the skills in game situation with teaching of rule of the game

Unit: 2

1. Teaching of some of Asanas – demonstration, practice, correction and practice
2. Teaching of skills of Table Tennis – demonstration, practice of skills, correction and practice and involvement in game situation
3. Teaching of skills of Table Tennis – demonstration, practice of skills, correction and practice and involvement in game situation
4. Teaching of skills of Table Tennis – involvement of all the skills in game situation with teaching of rule of the game
5. Teaching – Meaning, Scope and importance of Physical Education 18. Teaching – Definition, Type of Tournaments 19. Teaching – Physical Fitness and Health Education

Unit: 3

1. Construction and laying out of the track and field (*The girls will have Tennikoit and Throw Ball).
2. Teaching of advance skills of Hockey – demonstration practice of the skills and correction. Involvement of all the skills in games situation with teaching of rules of the game

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3. Teaching of skills of Kho-Kho – demonstration practice of the skills and correction. Involvement of the skills in games situation
4. Teaching of advance skills of Kho-Kho – demonstration practice of the skills and correction. Involvement of all the skills in games situation with teaching of rules of the game
5. Teaching of different track events – demonstration practice of the skills and correction with competition among them.

Unit: 4 Teaching of different field events – demonstration practice of the skills and correction with competition among them.

1. Teaching of different asanas – demonstration practice and correction.
2. Teaching of weight training – demonstration practice and correction.
3. Teaching of circuit training – demonstration practice and correction.
4. Teaching of calisthenics – demonstration practice and correction.

Unit: 5 Teaching of different field events – demonstration practice of the skills and correction with competition among them.

1. Teaching of different asanas – demonstration practice and correction.
2. Teaching of different asanas – demonstration practice and correction.
3. Teaching of different asanas – demonstration practice and correction.
4. Teaching of different asanas – demonstration practice and correction.
5. Teaching of weight training – demonstration practice and correction.
6. Teaching of circuit training – demonstration practice and correction.
7. Teaching of calisthenics – demonstration practice and correction.

NOTE: Compulsory Uniform: Half pants, Tee Shirts, Shoes and socks all white (Girls will have white Tee Shirt and Track pants) 2) The games mentioned in the practical may be inter changed depending on the season and facilities.

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