

BAG101: FUNDAMENTALS OF HORTICULTURE

			TE	ACHINO	3 & EVAI	LUATION	N SCHEN	ЛE	
		ŗ	THEORY	Z .	PRAC	ΓICAL			
Course Code	Course Name	END SEM University Exam	Two term exam	Teachers Assessment*	END SEM University Exam	Teachers Assessment*	L	P	CREDITS
BAG101	Fundamentals of Horticulture	50	30	0	15	5	1	1	2

Legends: L - Lecture;P – Practical; C-Credit;

To study importance, branches and scope of horticultural crops

Course Outcomes:

- 1. Student will able to understand Horticultural plant propagating methods
- 2. Student will able to understand Horticultural crops and its related aspects

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

BAGL 101: Practical

Identification of garden tools. Identification of horticultural crops. Preparation of seedbed /nursery bed. Practice of sexual and asexual methods of propagation including micro-propagation. Layout and planting of orchard. Training and pruning of fruit trees. Preparation of potting mixture. Fertilizers application in different crops. Visit to commercial nurseries/ orchard

Books:

- 1. Introduction to Horticulture, Dr. N. Kumar, Rajyalakshmi publications (2017)
- 2. Fundamentals to Horticulture, Jitendra Singh, KalyaniPublishers (2018)

^{*}Teacher Assessment shall be based on following components: Quiz / Assignment / Project / Participation in Class, Course Objective:



BAG 102: FUNDAMENTALS OF PLANT BIOCHEMISTRY AND BIOTECHNOLOGY

		TE	ACHIN(G & EV	ALUATI	ON SCH	EN	1E	
		T	HEORY	•	PRACT	TICAL			
Course Code	Course Name	END SEM University Exam	Two term exam*	Teachers Assessment*	END SEM University Exam	Teachers Assessment*	L	P	CREDITS
BAG102	Fundamentals of Plant Biochemistry and Biotechnology	50	30	00	15	05	2	1	3

Legends: L - Lecture; P – Practical; C-Credit;

Course Objective: Basic knowledge of Plant Biochemistry and Biotechnology **Course Outcomes**

- 1. Student will able to understand importance of Biochemistry in agriculture
- 2. Student will able to understand Biotechnology importance in crop improvement

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.

^{*}Teacher Assessment shall be based on following components: Quiz / Assignment / Project / Participation in Class,



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.

BAGL 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.

(Prof. Vinod Dhar) Chairperson - Board of Studies, SVVV, Indore (Dr. K. N. Guruprasad) Dean-Faculty of Agriculture, SVVV, Indore (Dr. Shishir Jain) Controller of Examination, SVVV, Indore (Dr. Arvind Singh)
Joint Registrar,
SVVV, Indore



BAG103: Fundamentals of soil science

		7	TEACHIN	IG & I	EVALUA	TION SC	HEN	IE	
		Т	HEORY		PRAC'	TICAL			
Course Code	Course Name	END SEM University Exam	Two term exam*	Teachers Assessment*	END SEM University Exam	Teachers Assessment*	L	P	CREDITS
BAG103	Fundamentals of soil science	50	30	00	15	05	2	1	3

Legends: L - Lecture; **P** – Practical; **C**-Credit;

Course Objective: Basic knowledge of soil

Course Outcomes

- 3. Student will able to understand origin, classification of soil
- 4. Student will able to understand soil properties

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.

BAGL 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.

(Prof. Vinod Dhar)(Dr. K. N. Guruprasad)(Dr. Shishir Jain)(Dr. Arvind Singh)Chairperson - Board of Studies,
SVVV, IndoreDean-Faculty of Agriculture,
SVVV, IndoreController of Examination,
SVVV, IndoreJoint Registrar,
SVVV, Indore

^{*}Teacher Assessment shall be based on following components: Quiz / Assignment / Project / Participation in Class,





BAG 104: INTRODUCTION TO FORESTRY (NEW)

			TEACH	ING & EV	ALUATION	SCHEMI	E		
			THEORY		PRACT	ICAL			
Course Code	Course Name	END SEM University Exam	Two term exam*	Teachers Assessment*	END SEM University Exam	Teachers Assessment*	L	P	CREDITS
BAG104	Introduction To	50	30	00	15	05	1	1	2
	Forestry (New)								

Legends: L - Lecture; P – Practical; C-Credit;

Course Objective: Basic knowledge of forest

Course Outcomes

- 5. Student will able to understand agroforestry system
- 6. Student will able to understand forest mensuration

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.

^{*}Teacher Assessment shall be based on following components: Quiz / Assignment / Project / Participation in Class,



BAGL 104Practical:

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. Agro forestry 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.

(Prof. Vinod Dhar)(Dr. K. N. Guruprasad)(Dr. Shishir Jain)(Dr. Arvind Singh)Chairperson - Board of Studies,
SVVV, IndoreDean-Faculty of Agriculture,
SVVV, IndoreController of Examination,
SVVV, IndoreJoint Registrar,
SVVV, Indore



BAG 105: COMPREHENSION AND COMMUNICATION SKILLS IN ENGLISH

		1	TEAC	HING 8	EVALU	ATION	SC	HEME	C
	Course Name		HEOR	Y	PRACT	ICAL			70
Course Code	Course Name	END SEM University Exam	Two term exam*	Teachers Assessment*	END SEM University Exam	Teachers Assessment*	L	P	CREDITS
BAG105	COMPREHENSION AND COMMUNICATION SKILLS IN ENGLISH	50	30	00	15	05	1	1	2

Legends: L - Lecture; P – Practical; C-Credit;

Course Objective: Basic Knowledge of English

Course Outcomes

- 1. Student will able to understand English grammar
- 2. Student will able to understand vocabulary and report writing

Unit-1: Technical Description: techniques of Description; Describing machines and Mechanisms; Describing Process; Technical description of Tractor, Plow, Sprayer, Baler, Planter and Mower.

Unit-2: Listening Comprehension- Formal and Informal Listening, Active Listening, Benefits of Active Listening, Barriers to Listening, Listening to Scientific lectures, Academic Listening, Note Taking

Unit-3: Reading Comprehension, Vocabulary- Antonym, Synonym, Homophones, Homonyms, often confused words, One-Word Substitutions, Word Formations- Prefixes, Bases and Suffixes (Derivational and Inflectional)

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: BAGL: 105

- Oral Presentations
- Just a Minute (JAM Sessions)
- Group Discussions
- Listening Comprehension- Audio Exercises
- Situational dialogues / role play/ Simulated Communication Practice (Domain Specific)

^{*}Teacher Assessment shall be based on following components: Quiz / Assignment / Project / Participation in Class,



Books:

- Kratz, Abby Robinson (1995). Effective Listening Skills. Toronto: ON: Irwin Professional Publishing.
- Pease, Allan. (1998). Body Language. Delhi: Sudha Publications
- Prasad, H. M.(2001) *How to Prepare for Group Discussion and Interview*. New Delhi: Tata McGraw-Hill.
- Ranjan Barman, Communication English, A Universal Exercise book Publisher: Ranjan Barman; 1 edition (2016)
- Sanjay Kumar, PushpLata, Communication Skills, Oxford higher education

(Prof. Vinod Dhar) Chairperson - Board of Studies, SVVV, Indore (Dr. K. N. Guruprasad) Dean-Faculty of Agriculture, SVVV, Indore (Dr. Shishir Jain) Controller of Examination, SVVV, Indore (Dr. Arvind Singh) Joint Registrar, SVVV, Indore



BAG106: Fundamentals of Agronomy

			TEACH	IING &	EVALUA'	TION S	СНЕ	ME	
		Т	HEORY	<i>T</i>	PRACT	ICAL			
Course Code	Course Name	END SEM University Exam	Two term exam*	Teachers Assessment*	END SEM University Exam	Teachers Assessment*	L	Т	CREDITS
BAG106	Fundamentals of Agronomy	50	30	00	15	05	3	1	4

Legends: L - Lecture; P – Practical; C-Credit;

To study the principles of Agronomy

Course Outcomes:

- 1. Student will able to understand the importance of tillage in agriculture
- 2. Student will able to understand weed crop growth and development in terms of agronomy

Unit-1: Agronomy and its scope, seeds and sowing, tillage and tilth, 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.

BAGL 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

(Prof. Vinod Dhar) Chairperson - Board of Studies, SVVV, Indore (Dr. K. N. Guruprasad) Dean-Faculty of Agriculture, SVVV, Indore (Dr. Shishir Jain) Controller of Examination, SVVV, Indore (Dr. Arvind Singh) Joint Registrar, SVVV, Indore

^{*}Teacher Assessment shall be based on following components: Quiz / Assignment / Project / Participation in Class, Course Objective:





BAG107: RURAL SOCIOLOGY & EDUCATIONAL PSYCHOLOGY

			TEACHING & EVALUATION SCHEME								
		ı	THEORY	•	PRACTIC	CAL					
Course Code	Course Name	END SEM University Exam	Two term exam*	Teachers Assessment*	END SEM University Exam	Teachers Assessment*	L	P	CREDITS		
BAG107	Rural Sociology & Educational Psychology	50	40	10	00	00	2	0	2		

Legends: L - Lecture; P – Practical; C-Credit;

Course Objective: Basic knowledge of rural sociology and psychology

Course Outcomes

- 9. Student will able to understand rural sociology
- 10. Student will able to understand rural 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. SagarMondal (). A text book of rural development. Kalyani publisher.
- 3. B.D. Tyagi (). Fundamental of rural sociology. Rama Publisher.

^{*}Teacher Assessment shall be based on following components: Quiz / Assignment / Project / Participation in Class,



BAG108: INTRODUCTORY BIOLOGY

		Т	EACHI	NG & E	VALUAT	TION S	СНІ	EME	
		Tl	HEORY		PRACT	ICAL			
Course Code	Course Name	END SEM University Exam	Two term exam*	Teachers Assessment*	END SEM University Exam	Teachers Assessment*	L	P	CREDITS
BAG108	INTRODUCTORY BIOLOGY	50	30	00	15	05	1	1	2

Legends: L - Lecture; P – Practical; C-Credit;

Course Objective: Basic knowledge of Biology

Course Outcomes

- 11. Student will able to understand basic systematic of plant species
- 12. Student will able to understand about flowering plant morphology and seed

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 flowing plants. Seed and seed germination.

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

Unit-5: Role of animals in agriculture.

BAGL 108: Practical

Morphology of flowering plants – root, stem and leaf and their modifications.Inflorence, 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

^{*}Teacher Assessment shall be based on following components: Quiz / Assignment / Project / Participation in Class,





BAG109: Agricultural Heritage

			TEACH	IING & E	CVALUATIO	ON SCE	IEM	E	
		T	HEORY		PRACTI	CAL			
Course Code	Course Name	END SEM University Exam	Two term exam*	Teachers Assessment*	END SEM University Exam	Teachers Assessment*	L	P	CREDITS
BAG109	Agricultural Heritage	50	40	10	00	00	1	0	1

Legends: L - Lecture;P – Practical; C-Credit;

Course Objective: Basic knowledge of agriculture and its scope

Course Outcomes

- 13. Student will able to understand Agriculture history
- 14. Student will able to understand Agriculture Scope

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 Predesh, 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.

^{*}Teacher Assessment shall be based on following components: Quiz / Assignment / Project / Participation in Class,





BAG 110: ELEMENTARY MATHEMATICS

			TEACHIN	NG & EVA	LUATIO	N SCHI	EME	,	
		T	HEORY		PRACT	ICAL			
Course Code	Course Name	END SEM University Exam	Two term exam*	Teachers Assessment*	END SEM University Exam	Teachers Assessment*	L	P	CREDITS
BAG110	ELEMENTARY	50	40	10	00	00	2	0	2
	MATHEMATICS								

Legends: L - Lecture; P – Practical; C-Credit;

Course Objective: Basic knowledge of mathematics

Course Outcomes

- 1. Student will be able to understand the concept of the coordinate geometry.
- 2. Student will be able to understand the concept of differential and integral concept.
- 3. Student will be able to understand the application of the matrices and determinant.

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 Straight Lines, Parallel lines, Perpendicular lines, Angle of bisectors between two lines, Area of triangle and quadrilateral

Unit-2:

Circle: Equation of circle whose center 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 xn, ex, 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

^{*}Teacher Assessment shall be based on following components: Quiz / Assignment / Project / Participation in Class,



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. Text Book for A.P Intermediate Mathematics-Paper (IA& IIB)
- 4. MVSL DN Raju and K.V.Ramana-Agricultural Mathematics .

(Prof. Vinod Dhar)(Dr. K. N. Guruprasad)(Dr. Shishir Jain)(Dr. Arvind Singh)Chairperson - Board of Studies,
SVVV, IndoreDean-Faculty of Agriculture,
SVVV, IndoreController of Examination,
SVVV, IndoreJoint Registrar,
SVVV, Indore



BAG111: HUMAN VALUE AND ETHICS

		ı	TEACH	ING & F	CVALUAT	TION S	CHI	ЕМЕ	
		T	HEORY		PRACT	ICAL			
Course Code	Course Name	END SEM University Exam	Two term exam*	Teachers Assessment*	END SEM University Exam	Teachers Assessment*	L	P	CREDITS
BAG111	HUMAN VALUE AND ETHICS	50	40	10	00	00	1	0	1

Legends: L - Lecture; P - Practical; C-Credit;

Course Objective: Basic knowledge of Ethics and values

Course Outcomes

- 15. Student will able to understand Values and Ethics
- 16. Student will able to understand Principles and Philosophy of life

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)

(Prof. Vinod Dhar) Chairperson - Board of Studies, SVVV, Indore (Dr. K. N. Guruprasad) Dean-Faculty of Agriculture, SVVV, Indore

(Dr. Shishir Jain) Controller of Examination, SVVV, Indore (Dr. Arvind Singh) Joint Registrar, SVVV, Indore

^{*}Teacher Assessment shall be based on following components: Quiz / Assignment / Project / Participation in Class,





BAG112: PHYSICAL EDUCATION AND YOGA PRACTICES

				Teachin	g & Evalua	ation Scheme			
			Theory		Pı	ractical			
Course Code	Course Name	End Sem University Exam	Two Term Exam*	Teachers Assessment*	End Sem University Exam	Teachers Assessment*	L	P	Credits
BAG112	Physical Education And Yoga Practices	00	00	0	60	40	0	2	2

Legends: L - Lecture; P - Practical; C-Credit;

Course Objective: Basic knowledge of Physical education and Yoga

Course Outcomes:

- 1. To develop skills of different sports in students
- 2. Student will be trained in Yoga

Unit: 1

- 1. Teaching of skills of Football demonstration, practice of the skills, correction, involvement in game situation (For girls teaching of Tennikoit)
- 2. Teaching of different 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
- 8. 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

^{*}Teacher Assessment shall be based on following components: Quiz / Assignment / Project / Participation in Class,



with teaching of rule of the game

Unit: 2

- 12. Teaching of some of Asanas demonstration, practice, correction and practice
- 13. Teaching of some more of Asanas demonstration, practice, correction and practice
- 14. Teaching of skills of Table Tennis demonstration, practice of skills, correction and practice and involvement in game situation
- 15. Teaching of skills of Table Tennis demonstration, practice of skills, correction and practice and involvement in game situation
- 16. Teaching of skills of Table Tennis involvement of all the skills in game situation with teaching of rule of the game
- 17. Teaching Meaning, Scope and importance of Physical Education
- 18. Teaching Definition, Type of Tournaments
- 19. Teaching Physical Fitness and Health Education

Unit: 3

- 20. Construction and laying out of the track and field (*The girls will have Tennikoit and Throw Ball).
- 21. Teaching of skills of Hockey demonstration practice of the skills and correction.
- 22. Teaching of skills of Hockey demonstration practice of the skills and correction. And involvement of skills in games situation
- 23. 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
- 24. Teaching of skills of Kho-Kho demonstration practice of the skills and correction.
- 25. Teaching of skills of Kho-Kho demonstration practice of the skills and correction. Involvement of the skills in games situation
- 26. 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
- 27. Teaching of different track events demonstration practice of the skills and correction.
- 28. Teaching of different track events demonstration practice of the skills and correction.
- 29. Teaching of different track events demonstration practice of the skills and correction with competition among them.

Unit: 4

- 30. Teaching of different field events demonstration practice of the skills and correction.
- 31. Teaching of different field events demonstration practice of the skills and correction.
- 32. Teaching of different field events demonstration practice of the skills and correction.
- 33. Teaching of different field events demonstration practice of the skills and correction with competition among them.
- 34. Teaching of different asanas demonstration practice and correction.
- 35. Teaching of different asanas demonstration practice and correction.
- 36. Teaching of different asanas demonstration practice and correction.
- 37. Teaching of different asanas demonstration practice and correction.



- 38. Teaching of weight training demonstration practice and correction.
- 39. Teaching of circuit training demonstration practice and correction.
- 40. Teaching of calisthenics demonstration practice and correction.

Unit: 5

- 41. Teaching of different field events demonstration practice of the skills and correction with competition among them.
- 42. Teaching of different asanas demonstration practice and correction.
- 43. Teaching of different asanas demonstration practice and correction.
- 44. Teaching of different asanas demonstration practice and correction.
- 45. Teaching of different asanas demonstration practice and correction.
- 46. Teaching of weight training demonstration practice and correction.
- 47. Teaching of circuit training demonstration practice and correction.
- 48. 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.

(Prof. Vinod Dhar)(Dr. K. N. Guruprasad)(Dr. Shishir Jain)(Dr. Arvind Singh)Chairperson - Board of Studies,
SVVV, IndoreDean-Faculty of Agriculture,
SVVV, IndoreController of Examination,
SVVV, IndoreJoint Registrar,
SVVV, Indore