

**COURSE STRUCTURE OF THE
MANIPUR UNIVERSITY ORDINANCE FOR 4-YEAR UNDERGRADUATE PROGRAMME (FYUP), 2025 BASED ON NEP-2020**

Year	Semester	Major (Credit)	Minor (Credit)	MDC (Credit)	AEC (Credit)	SEC*/ Dissertation (Credit)	Experimental Learning (Credit)	VAC (Credit)	Total Credits	Additional Summer Internship
I	I	Major-1 (4) (Level 100): Foundation of Physical Education	Minor-1 (4) (Level 100): Foundation of Physical Education	MDC-1 (3): Fitness & Conditioning	AEC-1 (Language and Communicati on Skill) (4)	SEC-1 (3): (a) Swimming (b) Tennis (c) Wushu,		VAC-1 (2) One should be opted from the University pool	20	Additional for Bachelor's Certificate (4)
	II	Major-2 (4) (Level 100): Anatomy & Physiology	Minor-2 (4) (Level 100): Anatomy & Physiology	MDC-2 (3): Yoga Education	AEC-2 (Academic Writing) (4)	SEC-2 (3): (a) Gymnastics (b) Kho-Kho (c) Kabaddi		VAC-2 (2) One should be opted from the University pool	20	
							1 Year Credit		40	
Students exiting at 1 Year will be awarded Bachelor's Certificate after earning minimum credit in the concerned discipline provided the student earned additional 4 credits in work-based vocational courses offered during the summer internship or apprenticeship.										
II	III	Major-3 (4) (Level 200): Sports Psychology & Sociology Major-4 (4) (Level 200): Kinesiology & Biomechanics	Minor-3 (4) (Level 200 & Above): Kinesiology & Biomechanics	MDC-3 (3): Sports Nutrition		SEC-3 (3): (a) Basketball (b) Handball (c) TableTennis		VAC-3 (2) One should be opted from the University pool	20	Additional for Bachelor's Diploma, if not done in 1 st Year (4)
	IV	Major-5 (4) (Level 200): Basic of Sports Training Major-6 (4) (Level 200):	Minor-4 (4) (Level 200 & Above): Track & Field						20	

		Movement Education Major-7 (4) (Level 200): Track & Field Major-8 (4) (Level 200): Football								
								II Year Credit	80	
Students exiting at 2 Year will be awarded Bachelor's Diploma after earning minimum credit in the concerned discipline provided the student earned additional 4 credits in work-based vocational courses offered during first year or second year summer internship or apprenticeship.										
III	V	Major-9 (4) (Level 300): Methods & Technology in Physical Education Major-10 (4) (Level 300): Sports Management Major-11 (4) (Level 300): Badminton	Minor-5 (4) (Level 200 & Above): Methods & Technology in Physical Education				Internship/ Community engagement and service/ Field Project (4)		20	
	VI	Major-12 (4) (Level 300): Health Education Major-13 (4) (Level 300): Adapted Physical Education Major-14 (4) (Level 300): Indigenous Games of Manipur	Minor-6 (4) (Level 200 & Above): Indigenous Games of Manipur						20	

		Major-15 (4) (Level 300): Hockey								
	Total	60 Credits	24 Credits	9 Credits	8 Credits	9 Credits	4 Credits	6 Credits	120	
Students who want to exit at 3-year will be awarded Bachelor's Degree in the relevant Discipline/Subject upon-earning the required credit to 120 from 1 st , 2 nd , and 3 rd year.										
IV	VII	Major-16 (4) (Level 400): Measurement & Evaluation Major-17 (4) (Level 400): Sports Statistics Major-18 (4) (Level 400) Research Methodology	Minor-7 (4) (Level 300 & Above): Measurement & Evaluation				For Honours with Research Dissertation Part 1 (4 Credits) For Honours Students DSE-1** (4) (Level 300) in lieu of Dissertation: Track & Field, Cricket, Volleyball, Basketball, Hockey, Yoga (Any Two)		20	
	VIII	Major-19 (4) (Level 400): 1. Sports Training 2. Sports Psychology (Any One) Major-20 (4) (Level 400): 1. Exercise Physiology 2. Biomechanics (Any One)	Minor-8 (4) (Level 300 & Above): Any One from Major 19 & 20				For Honours with Research Dissertation Part 2 (8 Credits) For Honours Students DSE-2** (4) (Level 400): Sports Pedagogy DSE-3** (4) (Level 400): Recreation & Adventure Sports in lieu of Dissertation:		20	
	Total	80 Credits	32 Credits	9 Credits	8 Credits			6 Credits	160	
Students will be awarded Bachelor's Degree (Honours/Honours with Research) in the relevant discipline after earning 160 credits										

* SEC should be major oriented.

** DSE should be major oriented. These courses are offered in lieu of Dissertation/Project.

Majour-18 is Research Methodology is mandatory for both Honours and Honours with Research.

SYLLABUS

For

BACHELOR OF PHYSICAL EDUCATION AND SPORTS (BPES)

(4 Year Under-Graduate Programme)

Based on the

**Manipur University Ordinance for Four Year Undergraduate Programme
(FYUP), 2025 based on NEP-2020**

**National Higher Education Qualification Framework (NHEQF), 2023
(National Credit Framework and Credit Framework for Undergraduate
Programme 2022 of UGC)**

SEMESTER- I

Major Subject-1(4): (Level- 100)

MJC45PES101(T)25: History and Foundation of Physical Education

4 Credits

Course Objective:

Course Learning Outcomes:

1. The pass out students would be able to compare the relationship between general education and physical education.
2. Students will be able to understand and relate with the History of Physical Education.
3. Students will be able to comprehend the relationship among the different foundational aspects of Physical Education.
4. Students could understand the philosophical development of physical education.
5. Students will know recent development and academic foundation of Physical Education.

Course Contents

Unit-I: Introduction to Physical Education

- 1.1. Meaning, Definition and Scope of Physical Education
- 1.2. Aims and Objective of Physical Education
- 1.3. Importance of Physical Education in present era.
- 1.4. Misconceptions about Physical Education.
- 1.5. Relationship of Physical Education with General Education.
- 1.6. Physical Education as an Art and Science.

Unit-II: Historical Development of Physical Education in India

- 2.1 Physical education in Vedic Period, Early Hindu Period and Later Hindu Period
- 2.2 Physical education in Pre and Post Independence period
- 2.3 Physical Education in India (After 1947)
- 2.4 The early history and significant stages in the revival and development of the modern Olympic movement.
- 2.5 Educational and cultural values of Olympic movement.

Unit-III: Philosophical Foundation of Physical Education

- 3.1 Philosophical foundation: Idealism, Pragmatism, Naturalism, Realism.
- 3.2 Philosophy and Culture.
- 3.3 Fitness and wellness movement in the contemporary perspectives
- 3.4 Sports for all and its role in the maintenance and promotion of fitness.

Unit-IV: Foundational Aspects of Physical Education

- 4.1 Biological Foundation: growth and development, age, gender characteristics and body types.
- 4.2 Psychological Foundation: attitude, interest, cognition, emotions, sentiments, learning, motivation, personality.
- 4.3 Sociological Foundation: society, culture, social acceptance, recognition, leadership in physical education.

Unit-V: Olympic Movement

- 5.1 Olympic movement and Olympism
- 5.2 Ancient history of Olympic
- 5.3 Declination, revival, development of Olympic
- 5.4 Role of YMCA, LNIPE, HVPM and SAI in Physical Education.

References:

1. Bucher, C. A. (n.d.) - Foundation of physical education. St. Louis: The C.V. Mosby Co.
2. Deshpande, S. H. (2014) - Physical Education in Ancient India. Amravati: Degree college of Physical education.
3. Dash, B.N. (2003.) –Principles of Education, Neelkamal publication, Hyderabad,
4. Kamlesh, M.L. (2002) –Sociological Foundation of Physical Education, Metropolitan Book co. Pvt. Ltd., Delhi,
5. Pandey, R.S.(1991) Philosophical & Sociological Foundation of Education, Vinod PustakMandir, Agra,.
6. Bhatia, K.K. &Narang, C.L. (1984.)– Philosophical & Sociological Bases of Education, Prakash Bros., Ludhiana,
7. Adams, William.C (1991.) – Foundation of Physical Education Exercises and Sports Sciences, Lea and Febigor, Philadelphia,
8. Dr. Kamlesh M.L. (2004) - Principles and History of Physical Education and Sports, Friends Publication (India) New Delhi.
9. Dr. B.C.Kapri, Fundamentals of Physical Education, Friends Publication, DariyaGanj, Delhi (India).

Minor- Subject-1(4): (Level 100)

MNC45PES101(T)25: History and Foundation of Physical Education **4 Credits**

- Course Objective, Course Learning Outcomes and Course Content are same to Major-1

Multi-Disciplinary Course (MDC-1)

MDC45PES101(T)25: Fitness and Conditioning **3 Credits**

Course Objective:

Learning Outcomes:

1. Students will understand the basic concepts of fitness, conditioning and warming-up.
2. Students will enhance knowledge of fitness and conditioning training programs.
3. Students will gain more basic knowledge of warming-up exercises.
4. Students will understand and prepare weight management plans with proper diet.

Course Contents

Unit-I: Introduction to Fitness

- 1.1 Meaning and definition of fitness
- 1.2 Basic components of fitness
- 1.3 Types of Fitness, maintenance of fitness
- 1.4 Importance of fitness and well being

Unit-II: Introduction to Conditioning

- 2.1 Meaning and Definition of Conditioning
- 2.2 Types of Conditioning
- 2.3 Importance of Conditioning in fitness development
- 2.4 Planning for Conditioning.

Unit-III: Warming-up Exercises

- 3.1 Meaning and concept of warming-up
- 3.2 Types of warming-up
- 3.3 Importance of warming-up in sports conditioning training
- 3.4 General principles of warming-up exercise
- 3.5 Factors affecting warming-up exercise.

Unit-IV: Physical Fitness Components

- 4.1 Types of physical fitness
- 4.2 Strength and types
- 4.3 Speed and types
- 4.4 Endurance and types
- 4.5 Flexibility, Coordination and Agility

Unit-V: Weight Management and Balance Diet

- 5.1 Concept of weight management and its importance
- 5.2 Factor affecting weight management
- 5.3 Determination of desirable body height and weight
- 5.4 Balance diet and its components
- 5.5 Role of diet in weight management

References:

1. Bessesen, D. H. (2008). Update on Obesity. *J Clin Endocrinol Metab.*93(6), 2027-2034.
2. Butryn, M.L., Phelan, S., & Hill, J. O. (2007). Consistent self-monitoring of weight: a key component of successful weight loss maintenance. *Obesity (Silver Spring)*. 15(12), 3091-3096.
3. Bates M. (2008). *Health Fitness Management (2nd Ed.)* USA: Human Kinetics.
4. Fink, H.H., Burgoon, L.A., & Mikesky, A.E. (2006). *Practical Applications in Sports Nutrition*. Canada : Jones and Bartlett Publishers.
5. Lancaster S. & Teodoro, R. (2008). *Athletic Fitness for Kids*. USA: Human Kinetics.
6. Michael J. Gibney (2002) – *Human Nutrition*, Atlantic publication, New Delhi.
7. Martin Estwood (2005) – *Principle of human nutrition*, Atlantic publication, New Delhi.
8. Sharma, P.D. (1998). *Officiating and Coaching*. AP Publishers, Jalandhar.
9. *Rules of Games and Sports*. YMCA Publishing House, Jai Singh Rad (1986), New Delhi.

Ability Enhancement Course (AEC-1)

To be opted from the prescribed pool.

4 Credits

Skill Enhancement Course (SEC-1)

SEC45PES101(P)25: Swimming, Tennis, Wushu

3 Credits

Course Objective:

Course Learning Outcomes:

(a) Swimming

1. History and development of Swimming
2. Planning and measurement of swimming pool
3. Fundamental Skills Drills:
 - Entry into the pool
 - Developing water balance and confidence
 - Water fear removing drills
 - Floating-mushroom and Jelly-fish etc
 - Gliding-with and without kickboard
4. Teaching of competitive swimming strokes (minimum two strokes)- Body position, leg, kick, arm pull, breathing and co-ordination.
5. Starts and turns of the concerned strokes.
6. Water treading and simple jumping.
7. Learning of competition strokes – Freestyle, Breaststroke, Butterfly, Backstroke and Sidestroke.
8. Rules of competition and their interpretation, and duties of officials.

References

1. Helen, Elkington. Swimming- A handbook of Teacher. London: Cambridge University Press.
2. Counsilmen, James E. Science of Swimming. London: Pelham Books Ltd.
3. Torney, John A. Swimming. London: McGraw Hill Books Company Inc.
4. Spitz, Mark and Lemond, Alan. The Mark Spitz Complete Book of Swimming. London: Pelham Books Ltd. Gallagher, Harry. Harry Gallagher on Swimming. London: Pelham Books Ltd.

(b) Tennis

1. History and development of Tennis
2. Court development and marking
3. Grips- Eastern Forehand grip and Backhand grip, Western grip, Continental grip, Chopper grip.
4. Stance and Footwork.
5. Basic Ground strokes-Forehand drive, Backhand drive.
6. Basic service
7. Basic Volley
8. Over-head Volley
9. Chop
10. Tactics – Defensive, attacking in game.

11. Court marking.
12. Rules and their interpretations and duties of officials.

References:

1. Rick Chavez and Lois Smith N., Teaching Tennis, Surjeet Publication, New Delhi, 1996.
2. Simon Lee, How to Play Tennis, S.K. Sachdeva for Competition Review Pvt. Ltd. New Delhi, 1991.
3. Jim Brown, Tennis- Steps to Success, Human Kinetics, 2004.

(c) WUSHU

1. Origin, historical and development of Wushu.
2. Traditional and modern Wushu
3. Classification of Wushu disciplines (Taolu and Sanda)
4. Basic Stances- horse stance, bow stance, empty stance etc.
5. Fundamental Techniques: Punching, kicking, blocking, footwork etc.
6. Different forms of Taolu and Sanda
7. Tactics – Defensive and attacking in game.
8. Court marking.
9. Rules and duties of officials.
10. Training: Endurance, flexibility, strength, agility, running, jumping, skipping, and various stretching exercises.

Value Added Course (VAC-1)

VAC45.....(T) : To be opted from the prescribed Pool

2 Credits

ADDITIONAL SUMMER INTERNSHIP

SIN..... : Additional for Bachelor's Certificate

4 Credits

SEMESTER- II

Major Subject-2(4): (Level- 100)

MJC45PES102(T)25: Anatomy and Physiology

4 Credits

Course Objective:

Course Learning Outcomes:

1. The student will learn the basic structures and functions of human body by identifying, comparing and relating different systems, organs and their functional and structural units.
2. He would be able to relate and interpret the role of exercise on body systems and its relation to well being, through literature reviews and physical conditioning exercises.
3. Adapt the art to apply the knowledge of anatomy and physiology in physical activity classes at school level.
4. Construct anatomy and physiology related pedagogical materials exploring their creative imaginations while working in group and using technology.

Course Contents

Unit-I: Introduction and Level of Organization

- 1.1 Meaning and Concept of Anatomy and Physiology
- 1.2 Need and Importance of Anatomy in the field of physical Education.
- 1.3 Levels of Organization of Human Body- Cell, Tissue, Organ, System and classifications.
- 1.4 Microscopic Structure, Composition and function of Cell, Tissue, Organ and System
- 1.5 Essential Properties of living Organism.

Unit-II: Musculo-Skeletal System

- 2.1 Skeleton
 - 2.1.1 Different Parts of Human Skeleton
 - 2.1.2 Types of Bones
 - 2.1.3 Gross and Microscopic Structure and function of bones.
- 2.2 Joints-Classification, structure and functions of Joints
- 2.3 Muscles- classification, structure and functions of muscles
- 2.4 Skeleton Muscles- functions of major muscles of different part of body.

Unit-III: Body Systems and Functions

- 3.1 Cardio-Respiratory System:
 - 3.1.1. Anatomical position and gross structure of the Heart
 - 3.1.2. Systemic and Pulmonary Circulation
 - 3.1.3. Blood Vessels – Artery, Vein and Capillaries
- 3.2 Respiratory System:
 - 3.2.1. External and Internal Respiration
 - 3.2.2. Organs of Respiration
 - 3.2.3. Structure of Lungs
 - 3.2.4. Introduction of Mechanism of Respiration

Unit-IV: Digestive and Excretory System

- 4.1 Parts of Digestive Tract, Structure and Function

- 4.2 Steps of digestion, digestive glands – structure and function system
- 4.3 Routes of excretion from human body
- 4.4 Structure and functions of urinary system
- 3.5 Structure and functions of skin

Unit-V: Nervous and Humoral System

- 5.1 Nervous System
 - 5.1.1 Structural Division- central nervous system and peripheral nervous system
 - 5.1.2 Functional Division- autonomic nervous system and sensory motor nervous system.
 - 5.1.3 Brain and Spinal Cord- Structure and functions
- 5.2 Endocrine- types, location and functions of glands
- 5.3 Liver- structural division and functions of liver
- 5.4 Sense organs, classification and functions.

References

1. Bourne, Geoffery H. (1973). The Structure and Function of Muscles: London: Academic Press.
2. Chaurasia B.D. (1979). Human Anatomy Regional and Applied. CBS Publisher and Distributors.
3. Gupta, A. P. (2010). Anatomy and physiology. Agra: SumitPrakashan.
4. Gupta, M. and Gupta, M. C. (1980). Body and anatomical science. Delhi: Swaran Printing Press.
5. Guybon, Arthur C. (1976). Text book of Medical Physiology. (Philadelphia: W.B. Saunder Company.
6. Guyton, A.C. (1996). Textbook of Medical Physiology, 9th edition. Philadelphia: W.B.
7. James C. Clouch (1971). Fundamental Human Anatomy (Lea & Febiger, Philadelphia).
8. Lamb, G. S. (1982). Essentials of exercise physiology. Delhi: Surjeet Publication.
9. Mathew, D.K. and Fox E.L. (1976). Physiological Basis of Physical Education and Athletics (Philadelphia: W.B. Saunders Company.
10. Moorthy, A. M. (2014). Anatomy physiology and health education. Karaikudi: Madalayam.
11. Morehouse, L. E. & Miller, J. (1967). Physiology of exercise. St. Louis: The C.V. Mosby Co.
12. Morehouse, E. Miller, A.T. (1976). Physiology of Exercise. St. Louis: The C.V. Mosby Company, 7th Edition.
13. Pearce, E. C. (1962). Anatomy and physiology for nurses. London: Faber & Faber Ltd. Publications, Saunders Company.
14. Sharma, R. D. (1979). Health and physical education, Gupta Prakashan.
15. Singh, S. (1979). Anatomy of physiology and health education. Ropar: Jeet Publications.

Minor- Subject-2(4): (Level 100)

MNC45PES102(T)25: Anatomy and Physiology

4 Credits

- Course Objective, Course Learning Outcomes and Course Content are same to Major-2.

Multi-Disciplinary Course (MDC-2)

MDC45PES102(T)25: Yoga Education

3 Credits

Course Objective:

Learning Outcomes:

1. The students will gain the fundamental knowledge of Yoga.
2. The study will give the importance of different scopes of yoga in life.
3. The theoretical and practical approaches will be learned.

Course Contents

Unit – I: Introduction

- 1.1 Meaning and Definition of Yoga
- 1.2 Aims and Objectives of Yoga
- 1.3 Yoga in Early Upanisads
- 1.4 The Yoga Sutra: General Consideration
- 1.5 Need and Importance of Yoga in Physical Education and Sports.

Unit - II: Foundation of Yoga

- 2.1 The Astanga Yoga: Yama, Niyama, Asana, Pranayama, Pratyahara, Dharana, Dhyana and Samadhi.
- 2.2 Yoga in the Bhagavadgita - Karma Yoga, Raja Yoga, Jnana Yoga and Bhakti Yoga
- 2.3 Preparation for yoga practice.

Unit – III: Asanas

- 3.1 Meaning and definitions of asanas
- 3.2 Classification of asanas and their applications
- 3.3 Effect and importance of asanas on various body system
- 3.4 Planning for practicing yoga asanas.

Unit – IV: Pranayama and Kriya

- 4.1 Meaning and definition of pranayama
- 4.2 Types and importance of pranayama
- 4.3 Meaning and definition of kriya
- 4.4 Types and importance of kriyas.
- 4.5 Meditation

Unit –V: Education and Yoga

- 5.1 Definitions of yoga education
- 5.2 Importance of yoga education
- 5.3 Difference between yogic practices and physical exercises
- 5.4 Yoga education centers in India and abroad
- 5.5 Competitions of Yogasanas.

References:

- 1 Brown, F. Y.(2000). How to use yoga. Delhi:Sports Publication.
- 2 Gharote, M. L. &Ganguly, H. (1988). Teaching methods for yogic practices. Lonawala: Kaixydahmoe.

- 3 Rajjan, S. M. (1985). Yoga strengthening of relaxation for sports man. New Delhi: Allied Publishers.
- 4 Shankar, G. (1998). Holistic approach of yoga. New Delhi: Aditya Publishers.
- Shekar, K. C. (2003). Yoga for health. Delhi: Khel Sahitya Kendra.

Ability Enhancement Course (AEC-2)

To be opted from the prescribed common pool.

4 Credits

Skill Enhancement Course (SEC-2)

SEC45PES102(P)25: Gymnastics ,Kabaddi, Kho-Kho

4 Credits

Course Objective:

Course Learning Outcomes:

(a) Gymnastics

1. History and foundation of Gymnastics.
2. Different events of men and women.
3. Measurement and arrangement of equipments of different events.
4. Floor Exercise (boys and girls) - Forward Roll, Backward Roll, Sideward Roll, Cart Wheel, Handstand and forward roll, Backward roll to hand stand, Diving forward roll, Side split, Head stand, Different kinds of scale, Diving roll from beat board, Round off, Jumps-leap, scissors leap.
5. Balancing Beam (girls) - Walking and running on the beam, Turning movement on the beam, Cat jump, Dancing steps and movements, Mount (1/4 turn to cross sitting), Dismount (jump from the end of the beam with legs straddle in the air), Straddle mount, Forward roll on the bench and beam.
6. Parallel Bar (boys) - Mount from one bar, Straddle walking on parallel bar, Single and double step walk, Perfect swing, Shoulder stand on one bar and roll forward, Roll side, Shoulder stand., Front on back vault to the side (dismount).
7. Vaulting Horse (boys and girls) - Approach run and jump from the board, Cat vault, Squat vault, Straddle vault, Side vault.
8. Rhythmic activities (girls) - Basic skills or five elements of three selected apparatus, Choreography with music, Basic turns, jumps, leap with music.
9. Rules and regulations, and duties of officials.

References

1. Sturmt, Nik. Competitive Gymnastics, London: Stonlly Paul and Company Ltd. 1970.
2. De Carle, Tom. Hand Book of Progressive Gymnastics. Englewood Cliffs: N.J. Prentice Hall.
3. Lokon, Newton, C. and Williougby, Rodert, J. Complete Book of Gymnastics. Englewood Cliffs, N.J. Prentice Hall.

4. Cochranu, Tunvi, S. International Gymnastics for Girls and Women. London: Addition Wolly Publishing Co.
5. Cartur, Exhestine R. Gymnastics for Girls and Women. N.J. Prentice Hall. Federation Rules in Gymnastics.

(e) Kabaddi

1. History and development of Kabaddi
2. Court development and marking
3. Skills in Raiding-Touching with hand, various kicks, crossing of baulk line, Crossing of Bonus line, luring the opponent to catch, Pursuing.
4. Skills of Holding the Raider-Variou formations, Catching from particular position, Different catches, Luring the raider to take particular position so as to facilitate catching, catching formations and techniques.
5. Additional skills in raiding-Bringing the artis in to particular position, Escaping from various holds, Techniques of escaping from chain formation, Combined formations in offence and defense.
6. Ground Marking, Rules and Officiating.

(f) Kho-Kho

1. History and development of Kho-Kho
2. Court development and marking
3. General skills of the game-Running, chasing, Dodging, Faking etc.
4. Skills in chasing-Correct Kho, Moving on the lanes, Pursuing the runner, Tapping the inactive runner, Tapping the runner on heels, Tapping on the pole, Diving, Judgement in giving Kho, Rectification of Foul.
5. Skills in Running-Zig-zag running, Single and double chain, Ring play, Rolling in the sides, Dodging while facing and on the back, fakes on the pole, fake legs, body arm etc, Combination of different skills.
6. Ground Marking
7. Rules and their interpretations and duties of officials.

References

1. Kho-Kho, The game of chase and Trill, Bombay Maharashtra Kho-Kho Association.
2. Yogesh Yadav. Kho-Kho, Maharashtra Kho-Kho Association, 1969.
3. Rao, C. V. Kabaddi, Patiala, N.I.S. Publications.
4. Reddy, B. A. Scientific Kabaddi, Madras ; Raman's Printing Press.

Value Added Course (VAC-2)

VAC45.....(T) : To be opted from the prescribed Pool

2 Credits

ADDITIONAL SUMMER INTERNSHIP

(Same to Sem-I)

SIN..... : Additional for Bachelor's Certificate

4 Credits