

Sant Gadge Baba Amravati University, Amravati

Syllabus for EXAM. B.P.E.&S. Semester IV

Course Code	Course	Credit offered
822231	Major VI (T): Test and Measurement in Physical Education	2

COs:

1. Develop concepts related to test, measurement & evaluation.
2. Construct a strong basis in the evaluation techniques through the various test and measurements method used in physical education.
3. Analyse the physical ability and performance of an individual in various sports.
4. explain the basics of various test and measurement techniques.
5. Apply the criteria, classification and administration of test.

Course contain:

Unit I: History and Need:

History of measurement in physical education.

Meaning of test and measurement

Need for test and measurement in phy-education.

The use of test and measurement in physical education

Unit II: Criteria for selecting tests :

Validity, Reliability, Objectivity

Norms , Standard norms, Accuracy and interpretability

Unit III: Physical Fitness Test : Strength Test

Fleshman's battery on basic fitness test , Physical fitness index , Sargen test

Motor Fitness Tests –

J.C.R. Test , National Physical efficiency test

Cardiovascular test-

Harward's Step test , Foster test , Copper's Twelve minute Run and walk test

Unit IV: Sports Skill Tests -

Lockhart and McPherson Badminton Test , Johnson Basket Ball Test

McDonald Soccer Test, S.A.I. Volley Ball Test , S.A.I. Hockey Test

References

1. Clarks H : Application of measurement of health physical education, prentice Hall. inc. 1967.
2. Larson L.A. & Yucom R.D. Measurement and Evaluation in Physical Health and Recreation Education St. Luis C.V.Mosby Co.
3. Mathew, Donald: Measurement in Physical Education London,
4. W.B. Saunders & Co.
5. Neilson, N.P.: An elementary Course in Statistics Test and Measurement in Physical, California National Test, Polo Also.
6. Harbens Singh : Teaching Hockey Through Testing, Kamal, Laxmi Sports Industries.
7. Wilks, S.S.ElementaryStatisticalAnalysis, Calcutta, Oxford and T.B.H. Pub.
8. Barrow H. M. & R. McGee. A practical approach to measurement in physical education. Philadelphia: Lea and Febiger, 1997.
9. Kansal D. K. Test and Measurement in sports and physical education., New Delhi: D.V.S. Publications, 1996 Mathews D. K. Measurement in physical education. Philadelphia: W. B. Sounders Company, 1973.
10. Phillips D. A., & J. E. Hornak Measurement and Evaluation in physical education., New York: John Willey and Sons, 1979.

BPES IV Sem

Course Code	Course	Credit offered
822232	Major VII (T):Coaching In Sports	2

COs:

1. Learn the role of a coach in athlete development and performance enhancement.
2. Understand and implement various sports training techniques.
3. Design and execute structured training programs for different skill levels.
4. Utilize sports psychology principles to improve athlete motivation and focus.
5. Apply leadership and communication skills essential for effective coaching.

Unit 1: Fundamentals of Coaching

Definition, scope, and importance of sports coaching
Qualities and responsibilities of a good coach
Coaching philosophy and ethics
Understanding athlete development (age-wise & skill-wise)
Basic rules and regulations of major sports

Unit 2: Training Methods & Techniques

Principles of sports training
Warm-up & cool-down techniques
Strength, endurance, speed, agility, and flexibility training
Sport-specific skill development drills
Periodization and planning of training programs

Unit 3: Sports Psychology & Performance Analysis

Motivation and goal setting in sports
Stress management and mental conditioning
Team building and leadership in coaching
Techniques for analyzing performance
Role of technology in sports coaching

Unit 4: Injury Prevention & Practical Coaching

Common sports injuries and their prevention
First aid and rehabilitation in sports
Evaluating athlete performance and feedback mechanisms
Ethics and legal aspects in sports coaching

References

1. Dick W. Frank, Sports Training Principles 4th Ed. (London: A&C Black Ltd.), 2002.
2. Harre, D. Principles of Sports Training (Berlin: Sport Veulag), 1982.
3. Matveyev, L.P. Fundamentals of Sports Training (Moscow: Progress Publishers), 1977.
4. Singh, Hardayal, Science of Sports Training (New Delhi: DVSPublications), 1991.
5. Uppal, A.K. Principles of Sports Training (Delhi: Friends Publication), 2001.
6. Tudor B. Bompa & Mihai C. Carera, Periodization Training for Sports, Human Kinetics, 2005 (2nd Edition)

BPES IV Sem

Course Code	Course	Credit offered
822233	Major VIII (T):Recreation	2

COs:

1. Understand the meaning, scope, and significance of recreation in daily life.
2. Highlight the role of recreational activities & identify various forms of recreation.
3. Learn how to plan, organize, and manage recreational programs for diverse populations.
4. Understand the importance of recreational activities for people with disabilities and special needs.
5. Appreciation for recreation as a lifelong habit for a healthy and active lifestyle.

UNIT-I: Introduction

Meaning, Definitions and characteristics of recreation Importance of Recreation.

Misconceptions about Recreation Scope of Recreation.

Influence of recreation in social institutions family Education institutions
Community/Cultural Religious organization

UNIT-II: Planning for recreation

Planning criteria and objectives of recreation facilities.

Different types of indoor and outdoor recreation for urban and rural population.

Operation and maintenance of different recreation area and facilities. Sources of funding of recreational activities.

UNIT- III: Classification of Activities

Programmes in recreation Classification of Recreational Activities

Indoor and outdoor activities, water activities,

cultural activities, Literary activities, Nature and outing Social events

Adventure activities, Hobbies-Introduction to hobbies and types of hobbies

Agencies providing Recreation.

UNIT- IV: Camping and leadership

Aim, objectives and importance of camping. Organization and types of camp. Selection and layout of camp site. Camping leadership. Types and functions of recreation leaders

Qualification, qualities and training and recreation leaders.

REFERENCES:

1. Bright Charles K. and Herold C. Meyer. Recreational test and readings, Eaglewoodcliff, New Jersey Prentice Hall, Inc. 1953. Nesswed, M. H. and New Meyer E. s. Leisure and Recreation, New Yourk, Ronald Press.
2. Vannier Maryhalen, Methods and Material in Recreation leadership Philadelphia, W. B. Saunders company, 1959
3. Planning Facilities for Health Physical Education and recreation, Chicago, the Athletic institute, 1936.
4. Recreation areas: Their Design and equipments, New York: Ronal Press 1958,
5. Kran, R. G. Recreation and the schools : New York : Mac melon company.
6. Shivers J. S., Principles and practices of recreational services, London: MacMelon Company 1964.
7. Kledienst V. K. & Weston A there recreational sports programme prentice hall international Ic. London 1978.
8. Butler George introduction to community recreation (McGram Hill Book Company 1976)
9. Dubey and Nayak Recreation Reston AP publishers, Jalandhar. Marrow G S Therapeutic Recreation Reston Publishing company 1976.
10. Kelly J R Leisure Prentice Hall Inc. Englwood Cliffs N. J. (1982).

BPES IV Sem

Course Code	Course	Credit offered
822234	Major V (P): Combative Sports (Judo / Wrestling) Any One	1

Cos

- Perform fundamental stances and grips in Judo or Wrestling for balance and control.
- Execute Judo Throwing Techniques .
- Perform Judo Ground Techniques .
- Apply Wrestling Techniques & Holds.
- Develop Tactical & Competitive Skills.

The contents of the activity of below :

JUDO-

- i) Stance
- ii) Throwing Techniques standing, foreign throwing techniques.
 - 1. O-Goshi (Hip Throw)
 - 2. Harai Goshi (Sweeping join)
 - 3. Ippon-SeioNege (one side arm throw)
 - 4. SEIONEGE (One side shoulder throw)
 - 5. Tai-o-Joshi (Body Drop)
 - 6. Uchi Mata (Thigh Throw)
 - 7. O-ShotoGare (Major QuterReeping throw)
 - 8. O-UchiGare (Major inner Reeping throw)
- iii) Ground Technique (Score held)
 - a) Kasha Gatame (side four quarter hold)
 - b) YokeseoGatame (Upper four quarter hold)
 - c) Kata Gatame (shoulder hold)
 - d) KamaseoGatame (Upper four quarter hold)
 - e) Hadaka Jama (Neck Chock

WRESTLING -**Stance**

- a) SquareStance
- b) CrossStance
 - i)Right Cross stance
 - ii) Left cross stance
- c) Grip

Techniques–

- a) Dasti
- b) SerZirABagal (Dub)
- c) KhurZintaken
- d) Arm Bar
- e) Fine Kamar(Dhak)
- f) One Arm Throw(Dhobi)
- g) Bangadi
- h) OjBand (Nelson)
- i) Fitle
- j) EkDsateKePa(Kalajang)

BPES IV Sem

Course Code	Course	Credit offered
822235	Major VI (P): Rackets Sports (Ball-Badminton/Badminton/Table – Tennis) (Any One)	2

Cos

- 1 To analyse& interpret the Indoor sports (Racket) skills.
- 2 To appraise the rule & regulation of those Indoor sports (Racket games).
- 3 To demonstrate and assess various styles/technique of Racket sports.
- 4 To interpret the rules and regulations in real competition or game situation.
- 5 To officiate a match in real game situation in Racket sports.

1) Ball Badminton

I. Background of the game

- History and evolution of the game
- Basic rules and regulations
- Equipment and court dimensions

II. Fundamental Skills

1. Grip and Stance

- Forehand grip
- Backhand grip
- Ready stance

2. Basic Shots

- Underhand serve
- Overhead smash
- Drive shots
- Drop shots

3. Footwork Techniques

- Forward and backward movement
- Sideward movement
- Split step and recovery

III. Advanced Skills and Techniques

1. Attacking Strategies

- Placement of shots
- Smashes and quick returns

2. Defensive Strategies

- Blocking techniques
- Counter-attacks

3. Doubles and Team Coordination

- Role of front and back players
- Rotation and positioning strategies

IV. Rules and Officiating

- Scoring system
- Faults and fouls
- Umpiring signals
- Role of referees and line judges

2) Badminton

I. Background of the game

- History and evolution of badminton
- Basic rules and regulations (BWF guidelines)
- Court dimensions and marking
- Equipment: Rackets, shuttlecocks, net, and footwear

II Fundamental Skills

Grip: Forehand grip, backhand grip

Footwork: Basics of movement, split step, lunges, side steps

Strokes:

- i) Forehand and backhand clear
- ii) Forehand and backhand drop shot
- iii) Forehand and backhand drive
- iv) Smash and defensive lifts

Service and Receiving

- Types of services:
 - High serve (singles)
 - Low serve (doubles)
 - Flick serve
 - Drive serve
- Return of service techniques

3) TABLE TENNIS:

I. Introduction to Table Tennis

- History and development of the game
- Basic rules and regulations
- Equipment: Table, Net, Racket, and Ball
- Playing surface and dimensions

II. Fundamental Skills

- **Grip Techniques:**
 - Shake hand grip
 - Penhold grip
- **Stance and Footwork:**
 - Ready position
 - Side-to-side movement
 - Forward and backward movement
- **Basic Strokes:**
 - Forehand drive
 - Backhand drive
 - Forehand push
 - Backhand push

III. Advanced Techniques

- **Spin Techniques:**
 - Topspin
 - Backspin
 - Sidespin

- **Advanced Strokes:**
 - Forehand and backhand loop
 - Block shot
 - Chop shot
 - Flick shot
- **Service & Return:**
 - Forehand and backhand serve (Short, Long, Fast, Spin variations)
 - Serve reception techniques

IV. Strategy & Gameplay

- Offensive and defensive playstyles
- Placement and control
- Doubles strategies
- Rally construction

V. Match Play & Rules

- Singles and doubles gameplay
- Umpiring and scoring system
- Conduct and etiquette in table tennis
- Analysis of match situations

BPES IV Sem

Course Code	Course	Credit offered
822236	Minor IV (T): 1) Patanjali Yoga Sutra (Yogic Science Group)	3

COs:

- Understand the Meaning & Significance of Yoga
- Explore the Historical & Philosophical Foundations
- Apply Key Yogic Principles
- Comprehend Ashtanga Yoga &Samyama
- Analyze Spiritual Concepts & Liberation

Course contain:

Unit 1: Introduction to Yoga and Patanjali’s Yoga Sutras

- Meaning and Definition of Yoga
- Brief History and Origin of Yoga
- Introduction to Patanjali and His Contributions
- Structure of the Yoga Sutras (Four Padas Overview)
- Importance and Relevance of Patanjali Yoga Sutras in Modern Life

Unit 2: Samadhi Pada (The Path of Concentration & Meditation)

- Definition and Nature of Yoga (YogaśCitta-Vṛtti-Nirodhaḥ)
- Five Vrittis (Mental Modifications)
- Abhyasa (Practice) and Vairagya (Detachment)
- Types of Samadhi (Savikalpa&Nirvikalpa)

Unit 3: SadhanaPada (The Path of Practice)

- Kriya Yoga (Tapas, Svadhyaya, Ishvarapranidhana)
- Ashtanga Yoga (Eight Limbs of Yoga)
 - i. Yama (Ethical Disciplines)
 - ii. Niyama (Personal Disciplines)
 - iii. Asana (Postures)
 - iv. Pranayama (Breath Control)
 - v. Pratyahara (Withdrawal of Senses)
 - vi. Dharana (Concentration)
 - vii. Dhyana (Meditation)
 - viii. Samadhi (Absorption)

Unit 4: VibhutiPada (The Path of Powers and Achievements)

- Dharana, Dhyana, and Samadhi as Samyama
- Siddhis (Supernatural Powers) and their Role in Spirituality
- Concept of Inner Transformation through Yoga
- Role of Mind and Subconscious in Yoga Practice

Unit 5: KaivalyaPada (The Path of Liberation)

- Nature of Liberation (Kaivalya)
- Concept of Purusha and Prakriti
- Realization of the Self (Atman)
- Role of Karma and its Effects on Liberation

References

1. Swami Vivekananda, *Raja Yoga*, Publisher: Advaita Ashrama, Kolkata 1896
2. B.K.S. Iyengar *Light on the Yoga Sutras of Patanjali*, Publisher: HarperCollins 1993
3. T.K.V. Desikachar *The Heart of Yoga: Developing a Personal Practice* Publisher: Inner Traditions 1999
4. Swami Satchidananda *The Yoga Sutras of Patanjali: Translation and Commentary* Publisher: Integral Yoga Publications 1978
5. Swami Hariharananda Aranya *Yoga Philosophy of Patanjali* Publisher: SUNY Press 1983
6. Osho (Bhagwan Shree Rajneesh) *Yoga: The Science of the Soul* Publisher: St. Martin's Griffin 2002
7. Swami Prabhavananda *How to Know God: The Yoga Aphorisms of Patanjali* Publisher: Vedanta Press 1953
8. I.K. Taimni *The Science of Yoga: The Yoga Sutras of Patanjali* Publisher: The Theosophical Publishing House Year: 1961
9. P.V. Karambelkar *The Yoga Sutras of Patanjali: With Commentary and Relevant Notes* Publisher: Kaivalyadhama Yoga Institute 1983
10. Dr. Ishwar V. Basavaraddi *Patanjali Yoga Sutras: A Commentary* Publisher: Morarji Desai National Institute of Yoga 2012

BPES IV Sem

Course Code	Course	Credit offered
822236	Minor IV (T): 1) First Aid and Safety Education (Sports Medicine Group)	3

COs:

- Demonstrate First Aid Principles in active scenario.
- Perform Life-Saving Techniques.
- Provide Injury & Trauma Care.
- Respond to Medical & Environmental Emergencies.
- Enhance Safety & Emergency Preparedness.

Courses Contain:

Unit 1: Introduction to First Aid

- Definition, Importance, and Objectives of First Aid
- Principles of First Aid, Qualities and Responsibilities of a First Aider
- First Aid Kit: Components and Uses; Emergency Response Steps(DRABC – Danger, Response, Airway, Breathing, Circulation)

Unit 2: Basic First Aid Procedures

- Wound Management: Cuts, Scrapes, Bruises, and Burns
- Fractures and Dislocations: Types and First Aid Care
- Bleeding Control Techniques and Bandaging Methods
- Shock and Unconsciousness: Causes, Signs, and First Aid
- Cardiopulmonary Resuscitation (CPR) and Artificial Respiration

Unit 3: Medical Emergencies and First Aid

- First Aid for Heart Attack, Stroke, and Seizures
- Poisoning: Types, Symptoms, and Immediate Care
- Heatstroke, Hypothermia, and Drowning: First Aid Measures
- Animal and Insect Bites: Snake, Dog, Bee, and Scorpion Bites
- Allergic Reactions and Anaphylaxis: Identification and First Aid

Unit 4: Safety Education and Accident Prevention

- Home Safety: Fire Hazards, Electrical Safety, and Kitchen Safety
- Road Safety: Traffic Rules, Pedestrian Safety, and Accident Prevention
- Workplace Safety: Occupational Hazards and Safety Guidelines
- School Safety: Emergency Drills and Handling Common Injuries
- Recreational Safety: Water Safety, Hiking, and Sports Injury Prevention

Unit 5: Disaster Preparedness and Risk Management

- Natural Disasters: Earthquakes, Floods, Cyclones, and Landslides – First Aid and Safety Measures
- Fire Safety and Fire Extinguishers: Types and Usage
- Basic Search and Rescue Techniques
- Emergency Planning and Evacuation Procedures
- Role of First Responders and Community in Disaster Management

References

1. Khanna, B. (2018). *First Aid & Emergency Care*. New Delhi: S. Chand Publishing.
2. Sharma, R. (2019). *Essentials of First Aid & Safety Education*. Mumbai: Himalaya Publishing House.
3. Pande, S. & Gupta, A. (2020). *First Aid and Disaster Management*. New Delhi: Kalyani Publishers.
4. Patel, M. K. (2017). *A Handbook of First Aid & Safety Measures*. Chennai: Oxford Book Company.
5. Reddy, G. K. (2021). *Basic First Aid and Health Safety*. Hyderabad: Neelkamal Publications.
6. Joshi, A. (2016). *Fundamentals of First Aid & Safety Awareness*. Pune: Techno Publications.
7. Verma, S. (2022). *First Aid, CPR & Emergency Procedures*. Kolkata: Allied Publishers.
8. Naik, P. (2015). *First Aid & Health Safety for Schools & Colleges*. Jaipur: Rawat Publications.
9. Singh, R. & Mehta, D. (2023). *Safety Education & First Aid in Daily Life*. Bangalore: Vikas Publishing House.
10. Menon, T. (2018). *Practical Guide to First Aid & Emergency Response*. Chennai: Orient Blackswan.

BPES IVSem

Course Code	Course	Credit offered
822237	Minor IV (T): 1) Management of sports Infrastructure (Sports Coaching and Training Group)	3

COs:

- Understand Sports Infrastructure.
- Apply Planning & Design Principles.
- Analyze Financial & Revenue Models.
- Develop Facility Management Strategies.
- Evaluate Technological & Event Impacts.

Course contains:

UNIT 1: Introduction to Sports Infrastructure Management

- Definition and Scope of Sports Infrastructure
- Importance and Impact of Sports Facilities on Development
- Types of Sports Infrastructure: Indoor & Outdoor Facilities
- Public vs. Private Sports Infrastructure
- Role of Government and Organizations (IOC, FIFA, BCCI, etc.)

UNIT 2: Planning and Development of Sports Infrastructure

- Site Selection and Feasibility Studies
- Designing Sports Facilities: Safety, Accessibility, and Sustainability
- Budgeting and Financing Sports Infrastructure
- Legal and Regulatory Aspects
- Environmental Considerations and Green Sports Infrastructure

UNIT 3: Operations and Maintenance of Sports Facilities

- Facility Management and Administration
- Maintenance Planning: Preventive and Corrective Maintenance
- Health and Safety Standards in Sports Infrastructure
- Waste Management and Sustainability Practices
- Technology Integration in Sports Facilities

UNIT 4: Event Management and Utilization of Sports Infrastructure

- Hosting National and International Sporting Events
- Scheduling and Resource Allocation
- Revenue Generation: Ticketing, Sponsorship, and Merchandising
- Managing Multi-Purpose Sports Venues
- Fan Engagement and Spectator Experience

UNIT 5: Future Trends and Challenges in Sports Infrastructure Management

- Smart Stadiums and Digital Transformation
- Impact of Mega Events (Olympics, FIFA World Cup) on Infrastructure
- Challenges in Maintenance and Upgradation
- Evolving Policies and Investments in Sports Infrastructure
- Case Studies of Successful Sports Infrastructure Projects

References

1. Chanavat, N., Desbordes, M., &Lorgnier, N. (2017). *Routledge Handbook of Sports Marketing: Sports Business Development and Infrastructure Management*. Routledge.

2. Fried, G. (2015). *Managing Sport Facilities* (3rd ed.). Human Kinetics.

3. Ammon, R., Southall, R. M., & Blair, D. (2019). *Sport Facility Management: Organizing Events and Mitigating Risks* (3rd ed.). Fit Publishing.

4. Sawyer, T. H., Judge, L. W., & Hypes, M. G. (2020). *Sport Facility and Event Management*. Sagamore Publishing.

5. Pedersen, P. M., & Thibault, L. (2019). *Contemporary Sport Management* (6th ed.). Human Kinetics.

6. Masteralexis, L. P., Barr, C. A., & Hums, M. A. (2018). *Principles and Practice of Sport Management* (6th ed.). Jones & Bartlett Learning.

BPES IVSem

Course Code	Course	Credit offered
822237	Minor IV (P):Patanjali Yoga Sutra – Kriya (Yogic Science Group)	1

COs:

- Explain the significance, types, and benefits of Non-Instrumental and Instrumental Kriyas.
- Successfully practiceKriyas.
- Demonstrate correct methods, precautions, and contraindications for safe kriya practice.
- Assess how kriyas impact Physical, and mental health.
- Utilize kriya techniques for overall health, well-being, and lifestyle enhancement.

Course contains:

Kriya:

Non-Instrumental Kriya

Uddyan, Agnisar, Nauli, Kapalbhati
Ujjayi, Pranayam, Tratak

Instrumental Kriya

Jalneti, Sutraneti, Vaman
DandaDhout, VastraDhaouti

References:

- Swami Satchidananda, (2012) The Yoga Sutras of Patanjali, Integral Yoga Publications; Reprint edition.
- Swami Muktibodhananda, (2000) Hatha Yoga Pradipika Book, Bihar School of Yoga; Reprint edition.
- Shrishri Ravi Shankar (2010), Patanjali Yoga Sutras: The Heart of Yoga, Sri Sri Publications Trust; First Edition.
- DharamVirMangla (2022), Kundlini and Kriya Yoga, Winsome Books India
- Swami NityanandaGiri (2014), Kriya Yoga: The science of Life force, MunshiramManoharlal Publishers Pvt Ltd

BPES IVSem

Course Code	Course	Credit offered
822237	Minor IV (P): Practical on First Aid and Safety Education (Sports Medicine Group)	1

COS:

- Identify the components of a first aid kit.
- Demonstrate cleaning, dressing, and bandaging techniques for minor wounds, cuts, and injuries.
- Provide appropriate first aid in emergency situations.
- Confidently perform and apply first aid techniques.

Course contain:

1 - First Aid and Safety Education

- i. Identify the components of a first aid kit.
- ii. Explain the use of each item.
- iii. Demonstrate proper storage and handling of the kit.
- iv. Cleaning and dressing a minor wound.
- v. Demonstrate different types of bandages (triangular, roller, crepe).
- vi. Practice proper bandaging techniques for different injuries.
- vii. First aid for minor and deep cuts.
- viii. Demonstration of first aid for burns (cold water, sterile dressing).

2 - Practical Book & viva

BPES IVSem

Course Code	Course	Credit offered
822237	Minor IV (P): 1) Management of sports Infrastructure (Sports Coaching and Training Group)	1

Cos:

- Recognize various types of sports facilities, including indoor and outdoor venues.
- Categorize infrastructure based on usage, such as educational, competitive, and recreational purposes.
- Examine the structural and functional aspects of different sports facilities.
- Conduct on-site assessments of sports infrastructure and understand their role in sports development.

Course contain:

1 Identification and Classification of Sports Infrastructure

- Visit a sports facility (indoor and outdoor).
- Identify different types of sports infrastructure (stadium, gymnasium, track & field, swimming pool, etc.).
- Classify facilities based on usage (educational, competitive, recreational).

2 Project Book & viva**BPES IV Sem**

Course Code	Course	Credit offered
University Basket	Value Education Course:	
	1. Digital and Technological solutions	1
	2. Environmental Sciences / Education II	1

BPES IVSem

Course Code	Course	Credit offered
822238	AEC 1 Major discipline related IKS Indian Heritage of Physical Fitness	1

Course Objectives	To explore the history, Traditional Martial Arts and global impact of the Indian Heritage in promoting sportsmanship and v. Preserve & Promote Cultural Heritage of India’s indigenous sports and martial arts..
Course Outcomes	After successful completion of course students should be able to – i. Understand Traditional Martial Arts origins, techniques, and significance. ii. Demonstrate Martial Art Techniques and defensive movements. iii. Analyze Traditional Indian Sports. iv. Apply Practical Skills and coordination through active participation. v. Preserve & Promote Cultural Heritage of India’s indigenous sports and martial arts.
Unit System	Contents
Unit I	Indian Martial Arts: Kalaripayattu: Originating in Kerala, Kalaripayattu is one of the oldest martial arts in the world. It combines strikes, kicks, grappling, and weaponry with healing techniques like massage and herbal medicine. Silambam: A traditional martial art from Tamil Nadu, Silambam focuses on stick fighting and has a rich heritage dating back to ancient Tamil kings. Gatka: Practiced by the Sikh community, Gatka is a martial art that uses swords and sticks. It is both a form of self-defense and a spiritual practice.
Unit II	Traditional Sports and Games: Kabaddi: A traditional team sport that combines elements of wrestling and tag, kabaddi is widely played across India and has gained international recognition through leagues and championships. Kho-Kho: A traditional Indian game of tag that emphasizes speed, agility, and strategic thinking. It is commonly played at schools and local competitions. Mallakhamb: An ancient sport involving gymnastic exercises performed on a vertical wooden pole or rope. It requires exceptional strength, flexibility, and balance.

References:

- SardarB. &Verma, K. (2014). *Manual of kabaddi*. International E – Publication.
- Verma, K. (2015). *Text Book of Kho-Kho*. International E – Publication.
- Gaur, A., &Deshpande, U. (1962). *Mallakhamb: Traditional Indian gymnastics*. Publisher.
- Sharma, V. K. (1998). *Traditional Indian games: Their history & significance*. Publisher.
- ChirakkalSreedharan T Nair (2016) Kalarippayattu: The Complete Guide to Kerala's Ancient Martial Art
- Zarrilli Phillip B (2000) When Body Becomes All Eyes, Oxford University Press
- Gupta, B. C. (1991). *Indigenous sports of India*. Publisher.
- SilambaPraveshika Complete Guide
- Nanak Dev Singh Khalsa, (1991) Gatka- Book Dance of the Sword, GT International; 2nd edition

BPES IVSem

Course Code	Course	Credit offered
822239	Minor V(T) – (Elective) 1)- Yoga and Relaxation techniques / Meditational Techniques in Yoga (any one) (Yogic Science Group,)	3

Course contains:

Minor V(T) – 1)- Yoga and Relaxation techniques(any one)

Cos :

By the end of the course the learners will be able to:

- Understand the principles, history, and significance of yoga and relaxation techniques.
- Demonstrate various relaxation postures and yogic breathing techniques for stress relief.
- Practice guided relaxation methods.
- Apply different meditation techniques to enhance mental clarity and emotional well-being.
- Integrate yoga and relaxation practices into daily life for holistic health and wellness.

Unit 1: Introduction to Yoga and Relaxation:

Meaning, definition, and objectives of Yoga, History and evolution of Yoga, Concept of stress and relaxation in Yogic philosophy, Importance of relaxation in modern lifestyle, Role of Yoga in stress management and holistic well-being.

Unit 2: Yogic Postures for Relaxation:

Importance of body alignment and posture-Relaxation Asanas: Shavasana (Corpse Pose), Makarasana (Crocodile Pose), SuptaBaddhaKonasana (Reclining Bound Angle Pose), Balasana (Child's Pose), ViparitaKarani (Legs-up-the-wall Pose). Benefits of these postures on physical and mental relaxation

Unit 3: Yogic Breathing and Pranayama for Relaxation:

The science of breath and its connection to relaxation, Basic breathing techniques for relaxation- Deep Abdominal Breathing, NadiShodhana (Alternate Nostril Breathing), Ujjayi (Victorious Breath), Bhramari (Humming Bee Breath). Role of Pranayama in reducing stress, anxiety, and improving focus

Unit 4: Guided Yogic Relaxation Techniques:

Yoga Nidra (Yogic Sleep) – Stages, techniques, and benefits. Autogenic Relaxation Techniques – Self-induced relaxation through visualization and autosuggestion. Guided Imagery and Visualization – Mental relaxation using positive imagery. Application of these techniques in daily life.

Unit 5: Meditational Techniques for Deep Relaxation:

Concept of meditation (Dhyana) in Yoga. Preparation for meditation – Posture, environment, and breath awareness. Different meditation techniques: Mantra Meditation (Chanting of OM), Mindfulness Meditation (Breath and body awareness), Trataka (Gazing Meditation) – Candle-gazing for concentration

Reference

1. Swami Vivekananda – *Raja Yoga*
2. Swami Sivananda – *The Science of Pranayama*
3. B.K.S. Iyengar – *Light on Yoga*
4. T. Krishnamacharya – *Yoga Makaranda*
5. Swami SatyanandaSaraswati – *Asana, Pranayama, Mudra, Bandha*
6. Dr. Ishwar V. Basavaraddi – *Yoga: Philosophy and Practice*
7. O.P. Tiwari – *Asana, Pranayama, Mudra, Bandha: Science and Practice of Yoga*
8. Dr. Nagendra H.R. – *Yoga for Health and Peace*
9. Swami Kuvalayananda – *Pranayama*
10. Patanjali (translated by Swami Prabhavananda) – *The Yoga Sutras of Patanjali*

Minor V(T) – I)- Meditational Techniques in Yoga (any one)

COS:

- Understand the principles, philosophy, and scientific basis of meditation in Yoga.
- Demonstrate preparatory techniques, postures, and breath control for effective meditation.
- Practice various meditation techniques such as Mantra Meditation, Mindfulness, and Trataka.
- Analyze the therapeutic and psychological benefits of meditation for mental well-being.
- Integrate advanced yogic meditation techniques into daily life for holistic self-development.

Unit 1: Introduction to Meditation in Yoga:

Definition and meaning of meditation (Dhyana). Importance of meditation in yogic philosophy. Difference between relaxation, concentration, and meditation. Role of meditation in physical, mental, and spiritual well-being. Scientific perspective: Effects of meditation on brain waves and nervous system.

Unit 2: Preparatory Practices for Meditation

Ideal environment, posture, and breath control for meditation. Importance of stillness and focus in meditation. Yogic concentration techniques (Dharana) as a precursor to meditation. Breath awareness techniques for deeper meditation. Overcoming common challenges in meditation (distractions, restlessness, and mind-wandering)

Unit 3: Types of Meditation in Yoga

Mantra Meditation – Chanting OM, Bija Mantras, Japa Meditation; Mindfulness Meditation – Breath awareness, body scan, present-moment focus; Trataka (Gazing Meditation) – Candle-gazing for concentration and mental clarity; Sahaja Meditation – Insight meditation for self-awareness; Dynamic Meditation – Active movement-based meditation (as in Kundalini or Osho meditation)

Unit 4: Therapeutic and Psychological Benefits of Meditation

Meditation for stress reduction and emotional balance, Impact of meditation on brain function and neuroplasticity. Meditation for anxiety, depression, and mental well-being. Enhancing focus, creativity, and cognitive abilities through meditation. Case studies and research on the benefits of meditation

Unit 5: Advanced Yogic Meditation Techniques

Kriya Yoga Meditation – Breath and energy channeling for deeper awareness. Chakra Meditation – Activating and balancing energy centers in the body. Nada Yoga (Sound Meditation) – Using sound vibrations for deep relaxation. Samadhi (Final Stage of Meditation) – Ultimate goal of meditation in Yoga.

Reference :

1. Swami Satchidananda *The Yoga Sutras of Patanjali: Translation and Commentary* Publisher: Integral Yoga Publications 1978
2. Swami Hariharananda Aranya *Yoga Philosophy of Patanjali* Publisher: SUNY Press 1983
3. Osho (Bhagwan Shree Rajneesh) *Yoga: The Science of the Soul* Publisher: St. Martin's Griffin 2002
4. Swami Prabhavananda *How to Know God: The Yoga Aphorisms of Patanjali* Publisher: Vedanta Press 1953
5. I.K. Taimni *The Science of Yoga: The Yoga Sutras of Patanjali* Publisher: The Theosophical Publishing House Year: 1961
6. P.V. Karambelkar *The Yoga Sutras of Patanjali: With Commentary and Relevant Notes* Publisher: Kaivalyadhama Yoga Institute 1983

BPES IV Sem

Course Code	Course	Credit offered
822239	Minor V(T) – (Elective) 2)- Wellness and Fitness / Wearable Technology (any one) (Sports Medicine Group)	3

Minor V(T) – 2)- Wellness and Fitness (any one)

Cos :

By the end of the course the learners will be able to:

- Understand the importance of wellness, fitness, and healthy living.
- Identify nutritious foods and practice healthy eating habits.
- Demonstrate basic exercises, yoga poses, and fun physical activities.
- Practice simple relaxation and mindfulness techniques for mental well-being.
- Adopt healthy daily habits for a balanced and active lifestyle.

Unit 1: Introduction to Wellness and Fitness

Meaning of wellness and fitness. Importance of staying active and healthy. Basic hygiene and personal care. Role of good posture in daily life. Fun activities for a healthy lifestyle

Unit 2: Healthy Eating for a Strong Body

Importance of a balanced diet (Fruits, Vegetables, Proteins, and Grains). Traditional Indian superfoods for good health. Drinking enough water and staying hydrated. Healthy vs. unhealthy foods (Identifying junk food). Fun food activities (e.g., making a healthy plate)

Unit 3: Fun Physical Activities and Exercises

Importance of daily exercise for growing kids. Simple stretching and warm-up exercises. Yoga for kids: Basic asanas (Tree Pose, Butterfly Pose, Cat-Cow Stretch). Outdoor games and their benefits (Running, Jumping, Catching, etc.). Dance, movement, and fun fitness games

Unit 4: Mental Well-being and Relaxation

Understanding feelings and emotions. Simple breathing exercises for calmness (Deep Breathing, Balloon Breaths). Introduction to mindfulness and relaxation. Practicing gratitude and positive thinking. Storytelling and visualization for relaxation

Unit 5: Healthy Daily Habits and Lifestyle

Importance of sleep and rest for growth. Managing screen time and being active. Good manners and social wellness. Family and community activities for well-being. Creating a personal wellness and fitness plan.

References:

- Nutrition for Health, Fitness & Sport, by Melvin H. Williams
- Health Fitness Management: A Comprehensive Resource for Managing and
- Operating Programs and Facilities, by Mike Bates
- Approach to Health and Hygiene for Healthy Lifestyle, by Dr. Tanuja S.
- Raut and Dr. Rajesh Kumar Das, Bookman Publisher.

Minor V(T) – 2)- Wearable Technology

Cos :

By the end of the course the learners will be able to:

- Understand the meaning, purpose, and evolution of wearable technology.
- Identify different types of wearable devices and their uses in daily life.
- Explore how wearable technology helps in health, fitness, and safety.
- Engage with smart learning tools like VR headsets and smart glasses.

Unit 1: Introduction to Wearable Technology:

Meaning and examples of wearable technology (Smartwatches, Fitness Bands, Smart Glasses). History and evolution of wearable devices. How wearable technology helps in daily life.

Unit 2: Wearable Technology for Health and Fitness:

Fitness bands and smart-watches: How they track steps, heart rate, and sleep. Importance of staying active and healthy using wearables. Understanding how wearables help in monitoring health (temperature, oxygen levels, etc.).

Unit 3: Smart Clothing and Accessories:

Introduction to smart clothing (temperature-regulating clothes, self-tying shoes). Wearable safety devices (GPS trackers, emergency alert bracelets). How wearable accessories improve daily life (smart glasses, smart rings, VR headsets).

Unit 4: Wearable Technology in Learning and Communication:

Use of smart glasses and VR headsets for education. Wearables for communication (Bluetooth headsets, smart badges). Fun learning experiences through wearable technology

Unit 5: Future of Wearable Technology and Responsible Usage:

Upcoming innovations in wearable technology. Advantages and challenges of wearables. Responsible and safe use of wearable devices (screen time, privacy, and safety).

References:

- Roger Bartlett (2007), Introduction to Sports Biomechanics: Analysing Human Movement Patterns, Routledge; 2nd edition
- HaiderRaad (2021), Fundamentals of Iot and Wearable Technology Design, Wiley-IEEE Press; 1st edition
- Fernando Jose Velez, FardinDerogarianMiyandoab (2017), Wearable Technologies and Wireless Body Sensor Networks for Healthcare, Institution of Engineering and Technology.
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- M.H Marks (2023) , Transform Your Health with Digital Wellness, Independently Published.

BPES IV Sem

Course Code	Course	Credit offered
822239	Minor V(T) – (Elective) 3)- Sports Training and Safety / Health And Fitness Training (Sports Coaching and Training Group)	3

Minor V(T) – 3) Sports Training and Safety

Cos :

By the end of the course the learners will be able to:

- Understand the importance of sports and physical activities for a healthy life.
- Demonstrate basic sports skills, warm-up routines, and training exercises.
- Apply safety measures to prevent sports injuries and use protective gear correctly.
- Adopt healthy habits like proper nutrition, hydration, and rest for athletic performance.
- Develop teamwork, sportsmanship, and fair play in different sports activities.

Unit 1: Introduction to Sports and Physical Activity

Importance of sports and physical activity for health. Different types of sports (indoor, outdoor, team, and individual). Basic rules and fair play in sports.

Unit 2: Basic Sports Skills and Training

Fundamental motor skills (running, jumping, throwing, catching). Introduction to warm-up and cool-down exercises. Fun drills and practice activities for coordination and agility.

Unit 3: Sports Safety and Injury Prevention

Importance of wearing proper sports gear (helmets, pads, shoes). Safe playing techniques to avoid injuries. Understanding common sports injuries and first aid basics.

Unit 4: Healthy Habits for Young Athletes

Importance of hydration and nutrition in sports. Proper rest and recovery for better performance. Building discipline and teamwork through sports.

Unit 5: Fair Play, Team Spirit, and Sportsmanship

Understanding teamwork, respect, and fair play in sports. Importance of following rules and respecting opponents. Fun team-building games and exercises

Reference :

- Dr. Raj Kumar Sharma (2014) Scientific Principles of Sports Training, Friends Publications.
- Dr. Sushil Chauhan (2017), Science of Sports training, Educational Publishers & Distributor.
- American National Red Cross (1997). Sport Safety Training: Injury Prevention and Care Handbook, Staywell
- Dr. Hari Singh (2021). Khel Prashikshan Ke Vaigyanik Siddhant (Scientific Principles of Sports Training), Friends Publications.
- Dr. Frank W. Dick O.B.E. et al. (2015), Sports Training Principles: An Introduction to Sports Science 6th Edition, Bloomsbury Sport; 6th edition

Minor V(T) – 3)-Health And Fitness Training

Cos :

By the end of the course the learners will be able to:

- Understand the importance of health, fitness, and an active lifestyle.
- Demonstrate basic exercises, stretches, and fitness activities.
- Identify healthy foods and make good nutrition choices.
- Practice relaxation techniques and maintain mental well-being.
- Adopt healthy daily habits for lifelong wellness.

Unit 1: Introduction to Health and Fitness

Meaning of health and fitness, Importance of staying active and fit, Basic daily habits for a healthy lifestyle

Unit 2: Fun Physical Activities and Exercises

Importance of regular exercise for kids. Simple stretching and warm-up routines. Basic exercises for strength, flexibility, and endurance.

Unit 3: Healthy Eating for a Fit Body

Importance of a balanced diet. Identifying healthy and unhealthy foods. Staying hydrated and eating nutritious meals.

Unit 4: Rest, Relaxation, and Mental Well-being

Importance of sleep and rest for good health. Simple breathing and relaxation exercises. Managing stress and emotions through mindfulness.

Unit 5: Developing Healthy Lifestyle Habits

Reducing screen time and staying active. Hygiene and self-care practices. Creating a personal fitness routine.

References:

- Dr. SushilChauhan (2017), Science of Sports training, Educational Publishers &Distributon.
- Federica Amati (2024), Every Body Should Know This: The Science of Eating, Michael Joseph.
- American National Red Cross (1997). Sport Safety Training: Injury Prevention and Care Handbook, Staywell
- Barbara Dee (2020), The Kaizen Method to Living a Healthy Lifestyle, Suncoast Digital Press Inc; 2nd ed. edition
- Dr. Hari Singh (2021).KhelPrashikshanKeVaigyanikSiddhant (Scientific Principles of Sports Training), Friends Publications.

BPES IV Sem

Course Code	Course	Credit offered
822239	Minor V(P) – (Elective) 1)- Yoga and Relaxation techniques / Mediational Techniques. (Yogic Science Group,)	1

Minor V(P) – 1)- Yoga and Relaxation techniques

Cos :

By the end of the course the learners will be able to:

- Understand the importance of yoga and relaxation for a healthy mind and body.
- Demonstrate basic yoga postures and stretching exercises for flexibility.
- Practice simple breathing techniques to improve focus and calmness.
- Engage in guided relaxation activities to reduce stress and improve well-being.
- Incorporate yoga and relaxation techniques into daily routines for a balanced lifestyle.

Basic Yoga Postures and Movements

Introduction to simple yoga poses for flexibility and balance.Practice of fun and engaging yoga asanas (Tree Pose, Butterfly Pose, Cat-Cow Stretch, Mountain Pose). Partner and group yoga activities for coordination and fun. Simple stretching exercises for relaxation and body awareness. Learning correct posture and breathing while performing asanas.

Relaxation and Breathing Techniques

Introduction to deep breathing and its benefits, Practice of easy breathing techniques (Balloon Breathing, Bumblebee Breath, Alternate Nostril Breathing). Guided relaxation techniques (Yoga Nidra for kids, Story-based Visualization). Fun mindfulness activities for focus and calmness. Practicing daily relaxation exercises for better sleep and reduced stress.

References

1. Swami Vivekananda, *Raja Yoga*, Publisher: AdvaitaAshrama, Kolkata 1896
2. B.K.S. Iyengar*Light on the Yoga Sutras of Patanjali*, Publisher: HarperCollins 1993
3. T.K.V. Desikachar*The Heart of Yoga: Developing a Personal Practice*Publisher: Inner Traditions 1999
4. Dr. Ishwar V. Basavaraddi*Patanjali Yoga Sutras: A Commentary* Publisher: Morarji Desai National Institute of Yoga 2012

Minor V(P) – 1) Meditational Techniques.

Cos:

- Understand the basics of meditation and its benefits for mental well-being.
- Demonstrate simple breath awareness and mindfulness techniques.
- Practice different meditation methods like mantra chanting and Trataka.
- Apply meditation for relaxation, focus, and emotional balance.
- Develop a habit of daily meditation for improved concentration and peace.

Course contain :

Unit 1: Basics of Meditation and Mindfulness

- Introduction to meditation: What it is and why it is important
- Practicing sitting still and focusing on breath
- Simple guided meditation techniques (breath awareness, counting breaths)
- Fun mindfulness activities (listening to sounds, feeling objects, mindful walking)
- Short storytelling-based meditation for relaxation and focus

Unit 2: Practical Meditation Techniques

- Practicing mantra meditation (chanting "OM" or simple sounds)
- Trataka (candle gazing) for improving focus and concentration
- Body scan meditation for relaxation and self-awareness
- Breathing exercises (Bumblebee Breath, Deep Belly Breathing) for calmness
- Creating a personal meditation routine for school and home

BPES IV Sem

Course Code	Course	Credit offered
822239	Minor V(P) – (Elective) 2) Fitness tests / Wearable Technology and its uses (Sports Medicine Group)	1

Minor V(P) – 2) Fitness tests uses

Cos :

By the end of the course the learners will be able to:

- Understand the importance of fitness testing in maintaining a healthy body.
- Demonstrate basic and advanced fitness tests for strength, endurance, flexibility, and coordination.
- Practice warm-up and cool-down techniques for safe fitness assessments.
- Analyze personal fitness levels and set improvement goals.
- Develop a habit of regular physical activity for better health and performance.

Unit 1: Introduction to Fitness and Basic Fitness Tests

- Understanding the importance of fitness and why we measure it
- Warm-up exercises to prepare for fitness activities
- Practicing basic fitness tests:
 - **Flexibility Test** – Sit and Reach Test
 - **Strength Test** – Standing Long Jump or Modified Push-Ups
 - **Speed Test** – 20-meter Shuttle Run
- Recording and tracking personal fitness levels
- Fun fitness challenges to improve physical abilities

Unit 2: Advanced Fitness Tests and Improvement Strategies

- Practicing additional fitness tests:
 - **Endurance Test** – 600-meter Run/Walk
 - **Balance Test** – One-Leg Stand Test
 - **Coordination Test** – Ball Catching Test
- Understanding how to improve fitness through regular activities
- Learning cool-down exercises for recovery
- Setting personal fitness goals and tracking progress
- Encouraging teamwork through group fitness activities

Minor V(P) – 2) Wearable Technology and its uses

BPES IV Sem

Course Code	Course	Credit offered
822239	Minor V(P) – (Elective) 3) Practical Approach of safety in sports / Practical Approach of Fitness (Sports Coaching and Training Group)	1

Cos :

By the end of the course the learners will be able to:

- Understand the concept and importance of wearable technology in daily life.
- Identify different types of wearable devices and their uses.
- Demonstrate how to use wearable technology for health and fitness tracking.
- Explore wearable devices for learning, safety, and communication.
- Develop creative ideas for future wearable technology innovations.

Unit 1: Introduction to Wearable Technology and Hands-on Exploration

- Understanding what wearable technology is and why it is useful
- Exploring different types of wearable devices (smartwatches, fitness bands, VR headsets)
- Hands-on experience with a fitness tracker (step count, heart rate monitoring)
- Understanding how wearables help in daily life (health, safety, learning)
- Fun activity: Tracking personal movement using a step counter

Unit 2: Practical Applications of Wearable Technology

- Using smartwatches for alarms, timers, and reminders
- Learning how wearable devices track health (sleep, calories, hydration)
- Exploring VR headsets for educational and fitness activities
- Understanding wearable safety devices (GPS trackers, emergency alert buttons)
- Group project: Discussing and designing a future wearable device idea

BPES IVSem

Course Code	Course	Credit offered
	Co-Curricular Courses(Activities) NSS/ UBA/ Cultural/ Sports/ Yoga etc.	2