# Devi Ahilya Vishwavidyalaya, Indore

# **Physical Education Faculty**

M.P.Ed. Two Year (Four Semester) Syllabus- 2015-16

> Registrar Devi Ahilya Vishwavidyalaya , Indore Indore – 452001 (M.P.)

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# Devi Ahilya Vishwavidyalaya, Indore

M.P.Ed. Two Year (Four Semester)

Syllabus- 2015-16

**First Semester** 

# Devi Ahilya Vishwavidyalaya , Indore

M.P.Ed. Two Year (Four Semester)

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# Devi Ahilya Vishwavidyalaya, Indore

#### SYLLABUS FOR TWO YEARS M.P.Ed PROGRAMME 2015-16 (FOUR SEMSTERS) M.P.Ed (Semester-I) PAPER-I

### MPEd-101 RESEARCH PROCESS IN PHYSICAL EDUCATION AND SPORTS SCIENCES

#### **UNIT I – Introduction**

Meaning and Definition of Research – Need, Nature and Scope of research in Physical Education. Classification of Research, Location of Research Problem, Criteria for selection of a problem, Qualities of a good researcher.

## **UNIT II – Methods of Research**

Descriptive Methods of Research; Survey Study, Case study, Introduction of Historical Research, Steps in Historical Research, Sources of Historical Research: Primary Data and Secondary Data, Historical Criticism: Internal Criticism and External Criticism.

## **UNIT III – Experimental Research**

Experimental Research – Meaning, Nature and Importance, Meaning of Variable, Types of Variables. Experimental Design - Single Group Design, Reverse Group Design, Repeated Measure Design, Static Group Comparison Design, Equated Group Design, Factorial Design.

# **UNIT IV – Sampling**

Meaning and Definition of Sample and Population. Types of Sampling; Probability Methods; Systematic Sampling, Cluster sampling, Stratified Sampling. Area Sampling – Multistage Sampling. Non- Probability Methods; Convenience Sample, Judgement Sampling, Quota Sampling.

# **UNIT V – Research Proposal and Report**

Chapterization of Thesis / Dissertation, Front Materials, Body of Thesis – Back materials. Method of Writing Research proposal, Thesis / Dissertation; Method of writing abstract and full paper for presenting in a conference and to publish in journals ,Mechanics of writing Research Report, Footnote and Bibliography writing.

#### **REFERENCE** :

Best J. W (1971) Research in Education, New Jersey; Prentice Hall, Inc Clarke David. H & Clarke H, Harrison (1984) Research processes in Physical Education, New Jersey; Prentice Hall Inc. Craig Williams and Chris Wragg (2006) Data Analysis and Research for Sport and Exercise Science, Londonl Routledge Press Jerry R Thomas & Jack K Nelson (2000) Research Methods in Physical Activities; Illonosis; Human Kinetics; Kamlesh, M. L. (1999) Reserach Methodology in Physical Education and Sports, New Delhi Moses, A. K. (1995) Thesis Writing Format, Chennai; Poompugar Pathippagam Rothstain, A (1985) Research Design and Statistics for Physical Education, Englewood Cliffs: Prentice Hall, Inc Subramanian, R, Thirumalai Kumar S & Arumugam C (2010) Research Methods in Health, Physical Education and Sports, New Delhi; Friends Publication Moorthy A. M. Research Processes in Physical Education (2010); Friend Publication, New Delhi

# M.P.Ed (Semester-I) PAPER-II

#### MPEd-102 PHYSIOLOGY OF EXERCISE

#### **UNIT I - Skeletal Muscles and Exercise**

Macro & Micro Structure of the Skeletal Muscle, Chemical Composition. Sliding Filament theory of Muscular Contraction. Types of Muscle fibre. Muscle Tone, Chemistry of Muscular Contraction - Heat Production in the Muscle, Effect of exercises and training on the muscular system.

#### UNIT II - Cardiovascular System and Exercise

Heart Valves and Direction of the Blood Flow - Conduction System of the Heart - Blood Supply to the Heart - Cardiac Cycle - Stroke Volume - Cardiac Output - Heart Rate - Factors Affecting Heart Rate - Cardiac Hypertrophy - Effect of exercises and training on the Cardio vascular system.

#### **UNIT III - Respiratory System and Exercise**

Mechanics of Breathing - Respiratory Muscles, Minute Ventilation - Ventilation at Rest and During Exercise. Diffusion of Gases - Exchange of Gases in the Lungs -Exchange of Gases in the Tissues - Control of Ventilation - Ventilation and the Anaerobic Threshold. Oxygen Debt - Lung Volumes and Capacities - Effect of exercises and training on the respiratory system.

#### UNIT IV - Metabolism and Energy Transfer

Metabolism - ATP - PC or Phosphagen System - Anaerobic Metabolism - Aerobic Metabolism - Aerobic and Anaerobic Systems during Rest and Exercise. Short Duration High Intensity Exercises - High Intensity Exercise Lasting Several Minutes - Long Duration Exercises.

**UNIT V - Climatic conditions and sports performance and ergogenic aids** Variation in Temperature and Humidity - Thermoregulation - Sports performance in hot climate, Cool Climate, high altitude. Influence of: Amphetamine, Anabolic steroids, Androstenedione, Beta Blocker, Choline, Creatine, Human growth hormone on sports performance. Narcotic, Stimulants: Amphetamines, Caffeine, Ephedrine, Sympathomimetic amines. Stimulants and sports performance.

Note: Laboratory Practicals in Physiology be designed and arranged internally.

#### **REFERENCES**:

- Amrit Kumar, R, Moses. (1995). Introduction to Exercise Physiology. Madras: Poompugar Pathipagam.
- Beotra Alka, (2000) Drug Education Handbook on Drug Abuse in Sports: Sports Authority of India Delhi.

Clarke, D.H. (1975). Exercise Physiology. New Jersey: Prentice Hall Inc., Englewood Cliffs. David, L Costill. (2004). Physiology of Sports and Exercise. Human Kinetics.

Fox, E.L., and Mathews, D.K. (1981). The Physiological Basis of Physical Education and Athletics.

Philadelphia: Sanders College Publishing. Guyton, A.C. (1976). Textbook of Medical Physiology. Philadelphia: W.B. Sanders co. Richard, W. Bowers. (1989). Sports Physiology. WMC: Brown Publishers. Sandhya Tiwaji. (1999). Exercise Physiology. Sports Publishers. Shaver, L. (1981). Essentials of Exercise Physiology. New Delhi: Subject Publications. Vincent, T. Murche. (2007). Elementary Physiology. Hyderabad: Sports Publication. William, D. Mc Aradle. (1996). Exercise Physiology, Energy, Nutrition and Human Performance.

Philadelphia: Lippincott Williams and Wilkins Company.

## M.P.Ed (Semester-I) PAPER -III

# MPEd-103 TEST, MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION UNIT I - Introduction

Meaning and Definition of Test, Measurement and Evaluation. Need and Importance of

Measurement and Evaluation. Criteria for Test Selection - Scientific Authenticity. Meaning,

definition and establishing Validity, Reliability, Objectivity. Norms - Administrative

Considerations.

#### **UNIT II - Motor Fitness Tests**

Meaning and Definition of Motor Fitness. Test for Motor Fitness; Indiana Motor Fitness Test (for elementary and high school boys, girls and College Men) Oregon Motor Fitness Test (Separately for boys and girls) - JCR test. Motor Ability; Barrow Motor Ability Test - Newton Motor Ability Test - Muscular Fitness - Kraus Weber Minimum Muscular Fitness Test.

#### **UNIT III - Physical Fitness Tests**

Physical Fitness Test: AAHPERD Health Related Fitness Battery (revised in 1984), ACSM Health Related Physical Fitness Test, Roger's physical fitness Index. Cardio vascular test; Harvard step test, 12 minutes run / walk test, Multi-stage fitness test (Beep test)

#### UNIT IV - Anthropometric and Aerobic-Anaerobic Tests

Physiological Testing: Aerobic Capacity: The Bruce Treadmill Test Protocol, 1.5 Mile Run test for college age males and females. Anaerobic Capacity: Margaria-Kalamen test, Wingate Anaerobic Test, Anthropometric Measurements: Method of Measuring Height: Standing Height, Sitting Height. Method of measuring Circumference: Arm, Waist, Hip, Thigh. Method of Measuring Skin folds: Triceps, Sub scapular, Suprailiac.

#### UNIT V - Skill Tests

Specific Spots Skill Test: Badminton: Miller Wall Volley Test. Basketball: Johnson Basketball Test, Harrison Basketball Ability Test. Cricket: Sutcliff Cricket test. Hockey: Friendel Field Hockey Test, Harban's Hockey Test, Volleyball, Russel Lange Volleyball Test, Brady Volleyball Test. Football: Mor-Christian General Soccer Ability Skill Test Battery, Johnson Soccer Test, Mc-Donald Volley Soccer Test. Tennis: Dyer Tennis Test.

Note: Practicals of indoors and out-door tests be designed and arranged internally.

#### **REFERENCES**:

Authors Guide (2013) ACSM's Health Related Physical Fitness Assessment Manual, USA: ACSM Publications

Collins, R.D., & Hodges P.B. (2001) A Comprehensive Guide to Sports Skills Tests and

Measurement (2nd edition) Lanham: Scarecrow Press Cureton T.K. (1947) Physical Fitness Appraisal and Guidance, St. Louis: The C. Mosby Company Getchell B (1979) Physical Fitness A Way of Life, 2nd Edition New York, John Wiley and Sons, Inc Jenson, Clayne R and Cynt ha, C. Hirst (1980) Measurement in Physical Education and Athletics,

New York, Macmillan Publising Co. Inc Kansal D.K. (1996), "Test and Measurement in Sports and Physical Education, New Delhi: DVS

Publications

Krishnamurthy (2007) Evaluation in Physical Education and Sports, New Delhi; Ajay Verma Publication

Vivian H. Heyward (2005) Advance Fitness Assessment and Exercise Prescription, 3rd Edition,

Dallas TX: The Cooper Institute for Aerobics Research Wilmore JH and Costill DL. (2005) Physiology of Sport and Exercise: 3rd Edition. Champaigm IL:

Human Kinetics

Yobu, A (2010), Test, Measurement and Evaluation in Physical Education in Physical Education and Sports. New Delhi; Friends Publicat

# M.P.Ed (Semester-I) PAPER-IV

# MPEd-104 SPORTS JOURNALISM AND MASS MEDIA

# **UNIT I Introduction**

Meaning and Definition of Journalism, Ethics of Journalism - Canons of journalism-Sports Ethics and Sportsmanship - Reporting Sports Events. National and International Sports News Agencies.

# **UNIT II Sports Bulletin**

Concept of Sports Bulletin: Journalism and sports education - Structure of sports bulletin -Compiling a bulletin - Types of bulletin - Role of Journalism in the Field of Physical Education: Sports as an integral part of Physical Education - Sports organization and sports journalism -General news reporting and sports reporting.

# UNIT III Mass Media

Mass Media in Journalism: Radio and T.V. Commentary - Running commentary on the radio -Sports expert's comments. Role of Advertisement in Journalism. Sports Photography: Equipment-Editing - Publishing.

# **UNIT IV Report Writing on Sports**

Brief review of Olympic Games, Asian Games, Common Wealth Games World Cup, National Games and Indian Traditional Games. Preparing report of an Annual Sports Meet for Publication in Newspaper. Organization of Press Meet.

# **UNIT -V Journalism**

Sports organization and Sports Journalism - General news reporting and sports reporting. Methods of editing a Sports report. Evaluation of Reported News. Interview with and elite Player and Coach.

Practical assignments to observe the matches and prepare report and news of the same; visit to News Paper office and TV Centre to know various departments and their working. Collection of Album of newspaper cuttings of sports news.

#### **REFERENCE**:

Ahiya B.N. (1988) Theory and Practice of Journalism: Set to Indian context Ed3. Delhi : Surjeet Publications

Ahiya B.N. Chobra S.S.A. (1990) Concise Course in Reporting. New Delhi: Surjeet Publication Bhatt S.C. (1993) Broadcast Journalism Basic Principles. New Delhi. Haranand Publication Dhananjay Joshi (2010) Value Education in Global Perspective. New Delhi: Lotus Press. Kannan K (2009) Soft Skills, Madurai: Madurai: Yadava College Publication Mohit Chakrabarti (2008): Value Education: Changing Perspective, New Delhi: Kanishka Publication.

Padmanabhan. A & Perumal A (2009), Science and Art of Living, Madurai: Pakavathi Publication Shiv Khera (2002), You Can Win, New Delhi: Macmillan India Limited. Varma A.K. (1993) Journalism in India from Earliest Times to the Present Period. Sterling publication Pvt. Ltd.

Venkataiah. N (2009) Value Education,- New Delhi: APH Publishing Corporation. 43

#### Practical

#### MPPC-403 CLASS ROOM TEACHING (LESSONS ON THEORY SUBJECTS)

The students of M.P.Ed-IV Semester need to develop proficiency in taking teaching lessons as per selected subjects/Topics of BP.Ed. level. In view of this, the students shall be provided with selected or specialized subject teaching experience. The duration of the lesson to be conducted by these students shall be in the range of 30 to 40 minutes depending on the class time they are going to handle at school and college level.

Each student teacher is expected to take at least five lessons during the course of the forth semester. The lessons will be supervised by the faculty members and experts who would discuss the merits and demerits of the concerned lesson and guide them for the future. In these teaching lessons, the duration should slowly increase and all the parts of the lesson covered progressively. (10 Internal/1External)

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# M.P.Ed (Semester-II)

### PAPER -I

## MPEd-201 APPLIED STATISTIC IN PHYSICAL EDUCATION & SPORTS

# **UNIT I – Introduction**

Meaning and Definition of Statistics. Function, need and importance of Statistics. Types of Statistics. Meaning of the terms, Population, Sample, Data, types of data. Variables; Discrete, Continuous. Parametric and non-parametric statistics.

**UNIT II –** Data Classification, Tabulation and Measures of Central Tendency Meaning, uses and construction of frequency table. Meaning, Purpose, Calculation and advantages of Measures of central tendency – Mean, median and mode.

## UNIT III – Measures of Dispersions and Scales

Meaning, Purpose, Calculation and advances of Range, Quartile, Deviation, Mean Deviation, Standard Deviation, Probable Error. Meaning, Purpose, Calculation and advantages of scoring scales; Sigma scale, Z Scale, Hull scale

**UNIT IV** – Probability Distributions and Graphs

Normal Curve. Meaning of probability- Principles of normal curve – Properties of normal curve. Divergence form normality – Skewness and Kurtosis. Graphical Representation in Statistics; Line diagram, Bar diagram, Histogram, Frequency Polygon, Ogive Curve.

# **UNIT V –** Inferential and Comparative Statistics

Tests of significance; Independent "t" test, Dependent "t" test – chi – square test, level of confidence and interpretation of data. Meaning of correlation – co-efficient of correlation – calculation of co-efficient of correlation by the product moment method and rank difference method. Concept of ANOVA and ANCOVA.

Note : It is recommended that the theory topics be accompanied with practical, based on computer software of statistics.

#### REFERENCE

Best J. W (1971) Research in Education, New Jersey; Prentice Hall, Inc

Clark D.H. (1999) Research Problem in Physical Education 2nd edition, Eaglewood Cliffs, Prentice Hall, Inc.

Jerry R Thomas & Jack K Nelson (2000) Research Methods in Physical Activities; Illonosis; Human Kinetics;

Kamlesh, M. L. (1999) Reserach Methodology in Physical Education and Sports, New Delhi Rothstain A (1985) Research Design and Statistics for Physical Education, Englewood Cliffs: Prentice Hall, Inc

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Sivaramakrishnan. S. (2006) Statistics for Physical Education, Delhi; Friends Publication
Thirumalaisamy (1998), Statistics in Physical Education, Karaikudi, Senthilkumar Publications.
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# M.P.Ed (Semester-II)

#### PAPER-II

#### MPEd-202 SPORTS BIOMECHANICS AND KINSESIOLOGY

#### **UNIT I - Introduction**

Meaning, nature, role and scope of Applied kinesiology and Sports Biomechanics. Meaning of Axis and Planes, Dynamics, Kinematics, Kinetics, Statics Centre of gravity -Line of gravity plane of the body and axis of motion, Vectors and Scalars.

#### UNIT II - Muscle Action

Origin, Insertion and action of muscles: Pectoralis major and minor, Deltoid, Biceps, Triceps (Anterior and Posterior), Trapezius, serratus, Sartorius, Rectus femoris, Abdominis, Quadriceps, Hamstring, Gastrocnemius.

#### UNIT III - Motion and Force

Meaning and definition of Motion. Types of Motion: Linear motion, angular motion, circular motion, uniform motion. Principals related to the law of Inertia, Law of acceleration, and law of counter force. Meaning and definition of force- Sources of force -Force components .Force applied at an angle - pressure -friction -Buoyancy, Spin - Centripetal force - Centrifugal force.

#### UNIT IV - Projectile and Lever

Freely falling bodies -Projectiles -Equation of projectiles stability Factors influencing equilibrium -Guiding principles for stability -static and dynamic stability. Meaning of work, power, energy, kinetic energy and potential energy. Leverage -classes of lever - practical application. Water resistance - Air resistance -Aerodynamics. Note: Laboratory practicals should be designed and arranged for students internally.

#### **UNIT V - Movement Analysis**

Analysis of Movement: Types of analysis: Kinesiological, Biomechanical. Cinematographic. Methods of analysis - Qualitative, Quantitative, Predictive.

Note: Laboratory Practicals be designed and arranged internally.

#### **REFERENCE**:

Deshpande S.H.(2002). Manav Kriya Vigyan - Kinesiology (Hindi Edition) Amravati :Hanuman Vyayam Prasarak Mandal. Hoffman S.J. Introduction to Kinesiology. Human Kinesiology publication In.2005. Steven Roy, & Richard Irvin. (1983). Sports Medicine. New Jersery: Prentice hall. Thomas. (2001). Manual of structural Kinesiology, New York: Me Graw Hill. Uppal A.K. Lawrence Mamta MP (2004) Kinesiology. Delhi, Friends Publication . Uppal, A K. (2004), Kinesiology in Physical Education and Exercise Science, Delhi, Friends publications. Williams M (1982) Biomechanics of Human Motion, Philadelphia; Saunders Co.

#### M.P.Ed (Semester-II)

#### PAPER -III

#### MPEd-203 ATHLETIC CARE AND REHABILITATION

#### **UNIT I - Corrective Physical Education**

Definition and objectives of corrective physical Education. Posture and body mechanics, Standards of Standing Posture. Value of good posture, Drawbacks and causes of bed posture. Posture test - Examination of the spine.

#### UNIT II - Posture

Normal curve of the spine and its utility, Deviations in posture: Kyphosis, lordosis, flat back, Scoliosis, round shoulders, Knock Knee, Bow leg, Flat foot. Causes for deviations and treatment including exercises.

#### **UNIT III - Rehabilitation Exercises**

Passive, Active, Assisted, Resisted exercise for Rehabilitation, Stretching, PNF techniques and principles.

#### **UNIT IV - Massage**

Brief history of massage - Massage as an aid for relaxation - Points to be considered in giving massage - Physiological , Chemical, Psychological effects of massage - Indication / Contra indication of Massage - Classification of the manipulation used massage and their specific uses in the human body - Stroking manipulation: Effleurage - Pressure manipulation: Petrissage Kneading (Finger, Kneading, Circular) ironing Skin Rolling - Percussion manipulation: Tapotement, Hacking, Clapping, Beating, Pounding, Slapping, Cupping, Poking, Shaking Manipulation, Deep massage.

#### UNIT V - Sports Injuries Care, Treatment and Support

Principles pertaining to the prevention of Sports injuries - care and treatment of exposed and unexposed injuries in sports - Principles of apply cold and heat, infrared rays - Ultrasonic, Therapy - Short wave diathermy therapy. Principles and techniques of Strapping and Bandages.

# Note: Each student shall submit Physiotherapy record of attending the Clinic and observing the cases of athletic injuries and their treatment procedure. (To be assessed internally)

#### **REFERENCES**:

Dohenty. J. Meno.Wetb, Moder D (2000) Track & Field, Englewood Cliffs, Prentice Hal Inc. Lace, M. V. (1951) Massage and Medical Gymnastics, London: J & A Churchill Ltd. Mc Ooyand Young (1954) Tests and Measurement, New York: Appleton Century. Naro, C. L. (1967) Manual of Massage and, Movement, London: Febra and Febra Ltd. Rathbome, J.I. (1965) Corrective Physical education, London: W.B. Saunders & Co. Stafford and Kelly, (1968) Preventive and Corrective Physical Education, New York

# M.P.Ed (Semester-II) PAPER-IV

## MPEd-204 SPORTS TECHNOLOGY

# **UNIT I - Sports Technology**

Meaning, definition, purpose, advantages and applications, General Principles and purpose of instrumentation in sports, Workflow of instrumentation and business aspects, Technological impacts on sports.

# **UNIT II - Science of Sports Materials**

Adhesives- Nano glue, nano moulding technology, Nano turf. Foot wear production, Factors and application in sports, constraints. Foams- Polyurethane, Polystyrene, Styrofoam, closedcell and open-cell foams, Neoprene, Foam. Smart Materials - Shape Memory Alloy (SMA), Thermo chromic film, High-density modelling foam.

# **UNIT III - Surfaces of Playfields**

Modern surfaces for playfields, construction and installation of sports surfaces. Types of materials - synthetic, wood, polyurethane. Artificial turf. Modern technology in the construction of indoor and outdoor facilities. Technology in manufacture of modern play equipments. Use of computer and software in Match Analysis and Coaching.

# **UNIT IV - Modern equipment**

Playing Equipments: Balls: Types, Materials and Advantages, Bat/Stick/ Racquets: Types, Materials and Advantages. Clothing and shoes: Types, Materials and Advantages. Measuring equipments: Throwing and Jumping Events. Protective equipments: Types, Materials and Advantages. Sports equipment with nano technology, Advantages.

## **UNIT V - Training Gadgets**

Basketball: Ball Feeder, Mechanism and Advantages. Cricket: Bowling Machine, Mechanism and Advantages, Tennis: Serving Machine, Mechanism and Advantages, Volleyball: Serving Machine Mechanism and Advantages. Lighting Facilities: Method of erecting Flood Light and measuring luminous. Video Coverage: Types, Size, Capacity, Place and Position of Camera in Live coverage of sporting events.

Note: Students should be encouraged to design and manufacture improvised sports testing equipment in the laboratory/workshop and visit sports technology factory/ sports goods manufacturers.

#### **REFERENCE**:

Charles J.A. Crane, F.A.A. and Furness, J.A.G. (1987) "Selection of Engineering Materials" UK:

Butterworth Heiremann. Finn, R.A. and Trojan P.K. (1999) "Engineering Materials and their Applications" UK: Jaico

Publisher.

John Mongilo, (2001), "Nano Technology 101 "New York: Green wood publishing group. Kochar, S.K. (1982) Methods and Techniques of Teaching (New Delhi, Jullandhar, Sterling Publishers Pvt. Ltd.)

Kozman, Cassidy and Jackson. (1952) Methods in Physical Education (W.B. Saunders Company,

Philadelphia and London) Walia, J.S. (1999)Principles and Methods of Education (Paul Publishers, Jullandhar)

# Practical

#### OFFICIATING LESSONS OF GAME SPECIALIZATIONS

The students of M.P.Ed – IV Semester need to be develop proficiency in taking officiating lesson on selected game specialization. In view of this, the students shall be provided with advance mechanism of officiating in selected game specialization. The duration of the lesson to be conducted by these students shall be in the range of 30 to 40 minutes depending on the class time they are going to handle at school and college level. Each student teacher is expected to take at least five lessons during the course of the fourth semester. The lessons will be supervised by the faculty members and experts who would discuss the merits and demerits of the concerned lesson and guide them for the future. In these officiating lessons, the duration should slowly increase and all the parts of the lesson covered progressively.

Note: Where ever details of any activities are not mentioned, it is expected to elaborate skills by the competent bodies of local Universities/ Autonomous Colleges.

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#### M.P.Ed (Semester-III)

#### PAPER -I

#### MPEd-301 SCIENTIFIC PRINCIPLES OF SPORTS TRAINING

#### **UNIT I - Introduction**

Sports training: Definition - Aim, Characteristics, Principles of Sports Training, Over Load: Definition, Causes of Over Load, Symptoms of Overload, Remedial Measures - Super Compensation - Altitude Training - Cross Training

#### **UNIT II - Components of Physical Fitness**

Strength: Methods to improve Strength: Weight Training, Isometric, Isotonic, Circuit Training, Speed: Methods to Develop Speed: Repetition Method, Downhill Run, Parachute Running, Wind Sprints, Endurance, Methods to Improve Endurance: Continuous Method, Interval Method, Repetition Method, Cross Country, Fartlek Training

#### **UNIT III - Flexibility**

Flexibility: Methods to Improve the Flexibility- Stretch and Hold Method, Ballistic Method, Special Type Training: Plyometric Training. Training for Coordinative abilities: Methods to improve Coordinative abilities: Sensory Method, Variation in Movement Execution Method, Variation in External Condition Method, Combination of Movement Method, Types of Stretching Exercises.

#### UNIT IV - Training Plan

Training Plan: Macro Cycle, Meso-Cycle. Short Term Plan and Long Term Plans - Periodisation: Meaning, Single, Double and Multiple Periodisation, Preparatory Period, Competition Period and Transition Period.

#### **UNIT V - Doping**

Definition of Doping - Side effects of drugs - Dietary supplements - IOC list of doping classes and methods. Blood Doping - The use of erythropoietin in blood boosting - Blood doping control

- The testing programmes - Problems in drug detection - Blood testing in doping control - Problems with the supply of medicines Subject to IOC regulations: over the- counter drugs (OTC)

- prescription only medicines (POMs) - Controlled drugs (CDs). Reporting test results - Education

#### **REFERENCES** :

Beotra Alka, (2000), Drug Education Handbook on Drug Abuse in Sports. Delhi: Sports Authority of India. Bunn, J.N. (1998) Scientific Principles of Coaching, New Jersey Engle Wood Cliffs, Prentice Hall Inc. Cart, E. Klafs & Daniel, D. Arnheim (1999) Modern Principles of Athletic Training St. Louis C. V. Mosphy Company Daniel, D. Arnheim (1991) Principles of Athletic Training, St. Luis, Mosby Year Book David R. Mottram (1996) Drugs in Sport, School of Pharmacy, Liverpool: John Moore University Gary, T. Moran (1997) - Cross Training for Sports, Canada : Human Kinetics Hardayal Singh (1991) Science of Sports Training, New Delhi, DVS Publications Jensen, C.R. & Fisher A.G. (2000) Scientific Basic of Athletic Conditioning, Philadelphia Ronald, P. Pfeiffer (1998) Concepts of Athletics Training 2nd Edition, London: Jones and Bartlett Publications Yograj Thani (2003), Sports Training, Delhi : Sports Publications

# M.P.Ed (Semester-III) PAPER –II

### MPEd-302 SPORTS MEDICINE

## UNIT I - Introduction

Meaning, definition and importance of Sports Medicine, Definition and Principles of therapeutic exercises. Coordination exercise, Balance training exercise, Strengthening exercise, Mobilization exercise, Gait training, Gym ball exercise Injuries: acute, sub-acute, chronic. Advantages and Disadvantages of PRICE, PRINCE therapy, Aquatic therapy.

## UNIT II - Basic Rehabilitation

Basic Rehabilitation: Strapping/Tapping: Definition, Principles Precautions Contraindications. Proprioceptive neuromuscular facilitation: Definition hold, relax, repeated contractions. Show reversal technique exercises. Isotonic, Isokinetic, isometric stretching. Definition. Types of stretching, Advantages, dangers of stretching, Manual muscle grading.

# UNIT III - Spine Injuries and Exercise

Head, Neck and Spine injuries: Causes, Presentational of Spinal anomalies, Flexion, Compression, Hyperextension, Rotation injuries. Spinal range of motion. Free hand exercises, stretching and strengthening exercise for head neck, spine. Supporting and aiding techniques and equipment for Head, Neck and Spine injuries.

# **UNIT IV - Upper Extremity Injuries and Exercise**

Upper Limb and Thorax Injuries: Shoulder: Sprain, Strain, Dislocation, and Strapping. Elbow: Sprain, Strain, Strapping. Wrist and Fingers: Sprain Strain, Strapping. Thorax, Rib fracture. Breathing exercises, Relaxation techniques, Free hand exercise, Stretching and strengthening exercise for shoulder, Elbow, Wrist and Hand. Supporting and aiding techniques and equipment for Upper Limb and Thorax Injuries.

#### **UNIT V - Lower Extremity Injuries and Exercise**

Lower Limb and Abdomen Injuries: Hip: Adductor strain, Dislocation, Strapping. Knee: Sprain, Strain, Strain, Strapping. Ankle: Sprain, Strain, Strapping. Abdomen: Abdominal wall, Contusion, Abdominal muscle strain. Free exercises - Stretching and strengthening exercise for Hip, knee, ankle and Foot. Supporting and aiding techniques and equipment for Lower limb and Abdomen injures.

Practicals: Lab. Practicals and visit to Physiotherapy Centre to observe treatment procedure of sports injuries; data collection of sports injury incidences etc. should be planned internally.

#### **REFERENCES**:

Christopher M. Norris. (1993). Sports Injures Diagnosis and Management for Physiotherapists.

East Kilbride: Thomson Litho Ltd. James, A. Gould & George J. Davies. (1985) Physical Therapy. Toronto: C.V. Mosby Company. Morris B. Million (1984) Sports Injuries and Athletic Problem. New Delhi: Surjeet Publication. Pande. (1998). Sports Medicine. New delhi: Khel Shitya Kendra

The Encyclopedia of Sports Medicine. (1998). The Olympic Book of Sports Medicine, Australia: Tittel Blackwell Scientific publications. Practical: Anthropometric Measurements,

# M.P.Ed (Semester-III)

# PAPER-III

# MPEd-303 HEALTH EDUCATION AND SPORTS NURTITION UNIT I-Health Education

Concept, Dimensions, Spectrum and Determinants of Health Definition of Health, Health Education, Health Instruction, Health Supervision Aim, objective and Principles of Health Education Health Service and guidance instruction in personal hygiene

# UNIT II- Health Problems in India

Communicable and Non Communicable Diseases Obesity, Malnutrition, Adulteration in food, Environmental sanitation, Explosive, Population, Personal and Environmental Hygiene for schools Objective of school health service, Role of health education in schools Health Services -Care of skin, Nails, Eye health service, Nutritional service, Health appraisal, Health record, Healthful school environment, first- aid and emergency care etc

# UNIT III - Hygiene and Health

Meaning of Hygiene, Type of Hygiene, dental Hygiene, Effect of Alcohol on Health, Effect of Tobacco on Health, Life Style Management, Management of Hypertension, Management of Obesity, Management of Stress

# **UNIT IV- Sports Nutrition**

Nutrition Meaning and Definition of Sports Nutrition, Role of nutrition in sports, Basic Nutrition guidelines, Nutrients: Ingestion to energy metabolism (Carbohydrate, Protein and Fat), Role of carbohydrates, Fat and protein during exercise.

#### **UNIT V- Weight Control Management**

Concept of BMI (Body mass index), Obesity and its hazard, Dieting versus exercise for weight control Maintaining a Healthy Lifestyle, Weight management program for sporty child, Role of diet and exercise in weight management, Design diet plan and exercise schedule for weight gain and loss.

#### **REFERENCES**:

Boyd-Eaton S. et al (1989) The Stone Age Health Programme: Diet and Exercise as Nature

Intended. Angus and Robertson. Bucher, Charles A. "Administration of Health and Physical Education Programme". Delbert, Oberteuffer, et. al." The School Health Education". Ghosh, B.N. "Treaties of Hygiene and Public Health". Hanlon, John J. "Principles of Public Health Administration" 2003. Moss and et. At. "Health Education" (National Education Association of U.T.A.) Nemir A. 'The School Health Education" (Harber and Brothers, New York). Nutrition Encyclopedia, edited by Delores C.S. James, The Gale Group, Inc. Terras S. (1994) Stress, How Your Diet can Help: The Practical Guide to Positive Health Using

Diet, Vitamins, Minerals, Herbs and Amino Acids, Thorons. Turner, C.E. "The School Health and Health Education".

# M.P.Ed (Semester-III)

### PAPER-IV

### MPEd-304 PHYSICAL FITNESS AND WELLNESS

#### **UNIT I - Introduction**

Meaning and Definition" of Physical Fitness, Physical Fitness Concepts and Techniques, Principles of physical fitness, Physiological principles involved in human movement. Components of Physical Fitness. Leisure time physical activity and identify opportunities in the community to participate in this activity. Current trends in fitness and conditioning, components of total health fitness and the relationship between physical activity and lifelong wellness.

#### **UNIT II - Nutrition**

Nutrients; Nutrition labelling information, Food Choices, Food Guide Pyramid, Influences on food choices-social, economic, cultural, food sources, Comparison of food values. Weight Management-proper practices to maintain, lose and gain. Eating Disorders, Proper hydration, the effects of performance enhancement drugs

#### UNIT III - Aerobic Exercise

Cardio respiratory Endurance Training; proper movement forms, i.e., correct stride, arm movements, body alignment; proper warm-up, cool down, and stretching, monitoring heart rates during activity. Assessment of cardio respiratory fitness and set goals to maintain or improve fitness levels. Cardio respiratory activities including i.e. power walking, pacer test, interval training, incline running, distance running, aerobics and circuits.

#### **UNIT IV - Anaerobic Exercise**

Resistance Training for Muscular Strength and Endurance; principles of resistance training, Safety techniques (spotting, proper body alignment, lifting techniques, spatial, awareness. and proper breathing techniques). Weight training principles and concepts; basic resistance exercises (including free hand exercise, free weight exercise, weight machines, exercise bands and tubing. medicine balls, fit balls) Advanced techniques of weight training

#### **UNIT V - Flexibility Exercise**

Flexibility Training, Relaxation Techniques and Core Training. Safety techniques (stretching protocol; breathing and relaxation techniques) types of flexibility exercises (i.e. dynamic, static), Develop basic competency in relaxation and breathing techniques. Pilates, Yoga.

#### **REFERENCE**:

David K. Miller & T. Earl Allen, Fitness, A life time commitment, Surjeet Publication Delhi 1989. Dificore Judy, the complete guide to the postnatal fitness, A & C Black Publishers Ltd. 35 Bedfordrow, London 1998 Dr. A.K. Uppal, Physical Fitness, Friends Publications (India), 1992. Elizabeth & Ken day, Sports fitness for women, B.T. Batsford Ltd, London, 1986. Emily R. Foster, Karyn Hartiger & Katherine A. Smith, Fitness Fun, Human Kinetics Publishers 2002. Lawrence, Debbie, Exercise to Music. A & C Black Publishers Ltd. 37, Sohe Square, London 1999 Robert Malt. 90 day fitness plan, D.K. publishing, Inc. 95, Madison Avenue, New York 2001 Warner W.K. Oeger & Sharon A.Hoeger,Fitness and Wellness, Morton Publishing Company,1990.

# MPEd-303 INTERNSHIP& PROJECT

**INTERNSHIP:** Every student has to serve honorary in the institution/ School/fitness centers.

Evaluated on the basis of Daily Diary preparation, regularity, teaching quality, sincerity, class

control and job execution.

# Criteria for evaluating Internship Programme:

- A Student will be required to join any school/ organization in any one of the following areas: o Gym and Health Club management. o Aerobics/Mass Demonstration. o Training of Life guard for water sports. o Sports Management/Journalism.
  - o Teaching Physical Education in Schools/Institutions/Centers.
- A student is required to bring a certificate on letter head of the Institute form the Head of the

Organization., specifying that he/she has imparted instruction/training/teaching in that

organization w.e.f ...... to ........ and his/her work has been excellent/very good/good/satisfactory/poor (The administrator may tick any one of the five alternatives).

**PROJECT:** Informative model (working or simple, preparation of informative chart or flex board) related to Physical Education, sport, health, wellness, yoga & fitness to be prepared individually or in group.

# Devi Ahilya Vishwavidyalaya, Indore

# **Physical Education Faculty**

M.P.Ed. Two Year (Four Semester)

Syllabus- 2015-16

Registrar Devi Ahilya Vishwavidyalaya , Indore Indore – 452001 (M.P.)

# M.P.Ed (Semester-IV) PAPER –I

# MPEd-401 SPORTS PSYCHOLOGY

## **UNIT I - Introduction**

Meaning, Definition, History, Need and Importance of Sports Psychology. Present Status of Sports Psychology in India. Motor Learning: Basic Considerations in Motor Learning - Motor Perception : Factors Affecting Perception - Perceptual Mechanism. Personality: Meaning, Definition, Structure - Measuring Personality Traits. Effects of Personality on Sports Performance.

# UNIT II - Motivation & Mental State

Meaning and Definition, Types of Motivation: Intrinsic, Extrinsic. Achievement Motivation: Meaning, Measuring of Achievement Motivation. Anxiety: Meaning and Definition, Nature, Causes, Method of Measuring Anxiety. Competitive Anxiety and Sports Performance. Stress: Meaning and Definition, Causes. Stress and Sports Performance. Aggression: Meaning and Definition, Method of Measurement. Aggression and Sports Performance. Self-Concept: Meaning and Definition, Method of Measurement.

## UNIT III - Goal Setting

Meaning and Definition, Process of Goal Setting in Physical Education and Sports. Psychological Tests: Types of Psychological Test: Instrument based tests: Pass-along test -Tachistoscope-Reaction timer - Finger dexterity board - Depth perception box -Kinesthesiometer board. Questionnaire: Sports Achievement Motivation, Sports Competition Anxiety.

# UNIT IV - Psychological aspects of Competition:

Defining competition, determinants of competitive behavior, psychological characteristics of pre-competition, during competition and post competition. Selected psycho regulative techniques technique for relaxation and activation. Psychological aspects of long term and short term preparation for competition, Psychological care of injuries, sports person, responses to injuries, prevention and coping techniques.

# UNIT V - Psycho-Social Facilitation:

Presence of others, co action effect and audience effect in sports. Factors mediating social facilitations. **Volitional regulation actions in sports:** Meaning, Characteristics and Factors affecting volitional regulated behavior. Development of volitional qualities.

# Practicals: Atleast five experiments related to the topics listed in the Units above should be conducted by the students in laboratory. (Internal assessment.)

# **REFERENCES**:

Authors Guide (2013) National Library of Educational and Psychological Test (NLEPT) Catalogue of Tests, New Delhi: National Council of Educational Research and Training Publication. Jain. (2002), Sports Sociology, Heal Sahety Kendre Publishers.

Jay Coakley. (2001) Sports in Society - Issues and Controversies in International Education, Mc-Craw Seventh Ed.

John D Lauther (2000) Psychology of Coaching. Ner Jersy: Prenticce Hall Inc. John D. Lauther (1998) Sports Psychology. Englewood, Prentice Hall Inc. Miroslaw Vauks & Bryant Cratty (1999). Psychology and the Superior Athlete. London: The Macmillan Co.

Richard, J. Crisp. (2000). Essential Social Psychology. Sage Publications.

Robert N. Singer (2001). Motor Learning and Human Performance. New York: The Macmillan Co. Robert N. Singer. (1989) The Psychology Domain Movement Behaviour. Philadelphia: Lea and Febiger. Thelma Horn. (2002). Advances in Sports Psychology. Human Kinetic. Whiting, K, Karman. Hendry L.B & Jones M.G. (1999) Personality and Performance in Physical Education and Sports. London: Hendry Kimpton Publishers.

# M.P.Ed (Semester-IV)

## PAPER-II

## MPEd-402 SPORTS MANAGEMENT

#### **UNIT I- Management:**

Meaning and Functions, The skills of management, the universal nature of the management process, Management and Administration, Principles and Theories of Management.

#### UNIT II- Organisation:

Classical Principles, Bureaucracy; Bureaucracy in Democracy and in sports organizations. Open systems perspectives. The constitution of a national sports organization, office holders of an organization and their functional meetings.

#### UNIT III- Human resource management:

Definition & Aspect of HRM, Job analysis and its process. Human resource planning, Recruitments, Manpower Planning, Personal Management and its principles, Appraisals & Public Relation in physical education.

#### **UNIT IV- Management of performance:**

Evaluation and its techniques in physical education. Sports competition and its system, Training structure & performance. Injury management, Ethics of sports.

#### UNIT V- Management of finance, Facilities and material:

Financial administration in sports and physical education, Sources of funds in sports. Budgeting is sports and games, purpose and principles of budgeting.

Material Management: Improvisation and Standardization of Sports equipments and materials.

Scientific purchasing. Storekeeping, inventory control and value analysis.

Facility (outdoor and indoor) Planning, Construction and maintenance of sports facilities.

#### **REFERENCE**:

Bucher Carles, A. (1987) Administration of Physical Education and Athletic programs. London, The C.V. Mosby Co.

Chelladurai P. (1985) Sports Management Macro perspective. canada Sports Dynamics

- Earle F. Zeigler & Grary W. Bowie(1993): Management competency Development in sports and physical education philadephip: W. Leo and Febiger. heph Bucher and Earnest Koerigeberg(1968): Scientific Inventory Management . New Delhi:
- Prentice Hall of India Pvt. Ltd., Morson James G and Jimpaul (1988) Modern Sports Administration. Englewood Cliffs, NerJersey: Prentice Hall, Inc.
- Scholar Rondoll S and Nicholas. J(1983) Personal Management. New York, West Publishing company.
- Vanderwag Harold. J(1984) Sports Management (New York: Mac Millon publishing company.

M.P.Ed (Semester-IV) PAPER -III

MPEd- GAMES SPECIALIZATION:

GAMES SPECIALIZATION: TRACK & FIELD /SWIMMING/ GYMNASTICS

# M.P.Ed (Semester-IV) PAPER-IV

# **MPEd-404 DISSERTATION**

1. A candidate shall have dissertation for M.P.Ed.-IV Semester and must submit his/her Synopsis and get it approved by the Head of Department on the recommendation of D.R.C. (Departmental Research Committee).

2. A candidate selecting dissertation must submit his/her dissertation not less than one week before the beginning of the IVth Semester Examination.

3. The candidate has to face the Viva-Voce conducted by DRC.

#### PRACTICAL

# MPEd- ADVENTURE or LEADERSHIP CAMP/TOUR/TRAINING & SEMINAR

**ADVENTURE ACTIVITIES:** Trekking, Wall climbing, River crossing, Mountaineering, etc **SEMINAR:** Presentation on topics of sports, yoga, wellness, health & fitness their research findings, survey of literature, development, historical or current issues.

10 days leadership camp is compulsory for every student before appearing IV semester Examination