



National Curriculum and Credit Framework

NEP (2020) SYLLABUS

FOR
FOUR YEARS UNDER-GRADUATE COURSE
IN

PHYSICAL EDUCATION AND SPORTS

(w.e.f. 2023)

5th and 6th Semester



BANKURA UNIVERSITY

BANKURA

WEST BENGAL

PIN 722155


Course Structure with Credit Distribution: U.G. 4 Years Programme with Single Major (NEP 2020)

Category of Course (Credit)	Major Course(4)		Minor Course (4)	Multidisciplinary (3)	Ability Enhancement Course (2)	Skill Enhancement Course (3)	Value Added Course	Summer Internship (2)	Research Project/ Dissertation(12)	Total Credit / No. of Course
SEM	DSC	DSE	(4)	(3)	(2)	(3)		(2)		
I	1X4=4	-	1X4=4	1X3=3	1X2=2	1X3=3	1X4=4	-	-	20/6
II	1X4=4	-	1X4=4	1X3=3	1X2=2	1X3=3	1X4=4	-	-	20/6
CERTIFICATE Course	Credit -8		Credit -8	Credit -6	Credit -4	Credit -6	Credit -8	Additional (4 Credit)	-	40
III	2X4=8	-	1X4=4	1X3=3	1X2=2	1X3=3	-	-	-	20/6
IV	4X4=16	-	1X4=4	-	1X2=2	-	-	-	-	22/6
DIPLOMA Course	Credit -32		Credit -16	Credit -9	Credit -8	Credit -9	Credit -8	Additional (4 Credit)	-	82
V	4X4=16	-	1X4=4	-	-	-	-	-	-	22/5
VI	4X4=16	-	1X4=4	-	-	-	-	-	-	20/5
DEGREE Course	Credit -64		Credit -24	Credit -9	Credit -8	Credit -9	Credit -8	Credit -2	-	124
VII	4X4=16	-	1X4=4	-	-	-	-	-	-	20/5
VIII	4X4=16*	-	1X4=4	-	-	-	-	-	12*	20/5
HONS Course	Credit -96		Credit -32	Credit -9	Credit -8	Credit -9	Credit -8	Credit -2	-	164
HONS Course	Credit -84		Credit -32	Credit -9	Credit -8	Credit -9	Credit -8	Credit -2	Credit -12	

**SYLLABUS STRUCTURE FOR PHYSICAL EDUCATION AND SPORTS****B.A Four Years UG Course: 5th Semester**

Course Code	Course Title	Course Type	Credit	Marks Division			Total Marks	No. of Hour (L-T-P)
				Int. Ass	Prac	E.S.E		
A/PHE/ 501/ MJC-9	Test, Measurement and Evaluation in Physical Education and Sports	Major	4	10	--	40	50	4-0-0
A/PHE/ 501/ MJC-10	Sports Medicine, Physiotherapy and Rehabilitation	Major	4	10	--	40	50	4-0-0
A/PHE/ 501/ MJC-11	Inclusive Physical Education & Sports and First Aid Management	Major	4	10	15	25	50	3-0-2
A/PHE/ 501/ MJC-12	Ground Marking and Lab Practical	Major	4	10	40	--	50	0-0-8
A/PHE/ 502/ MN-5	Inclusive Physical Education, Test, Measurement and Evaluation and Ground making <u>(Not for Major Students of Phy. Edu & Sports)</u>	Minor	4	10	15	25	50	3-0-2
SEMESTER			TOTAL:	20	50	200	250	

B.A Four Years UG Course: 6th Semester

Course Code	Course Title	Course Type	Credit	Marks Division			Total Marks	No. of Hour (L-T-P)
				Int. Ass	Prac	E.S.E		
A/PHE/601/ MJC-13	Sports Psychology and Sports Sociology	Major	4	10	--	40	50	4-0-0
A/PHE/601/ MJC-14	Computer Application and AI in Physical Education and Sports	Major	4	10	15	25	50	3-0-2
A/PHE/601/ MJC-15	Weight Training, Combative Sports, Indoor Games and Traditional Activity	Major	4	10	40	--	50	0-0-8
A/PHE/601/ MJC-16	Officiating & Coaching in Games & Sports and Leadership Camp	Major	4	10	15	25	50	3-0-2
A/PHE/602/ MN-6	Computer Application in Physical Education and Sports <u>(Not for Major Students of Phy. Edu & Sports)</u>	Minor	4	10	15	25	50	3-0-2
SEMESTER			TOTAL	20	50	200	250	

PHES= Physical Education and Sports (Subject Code) C= Core Course, E/H/MIL= English/ Hindi/ Modern Indian Language, H/MIL/E= Hindi/ Modern Indian Language/ English, AECC-E= Ability Enhancement Compulsory Course-English, AECC-ENV= Ability Enhancement Compulsory Course-Environmental Science, Int. Ass= Internal Assessment, ESE= End-Semester Examination, L= Lecture, T= Tutorial, and P=Practical, Prac= Practical, Theo= Theory.

Program Outcomes (Attribute wise)

1. **Disciplinary Knowledge and Skills:** The organization of physical and sports activities will develop sense of discipline in the students.
2. **Skilled Communicator:** Neuromuscular learning and activation requires good communicable skills on the part of the leader organizing them, which shall be developed in the students in course of their graduation program. Ability will be developed to express thoughts and ideas effectively, demonstrate the ability to listen carefully, read and write analytically, and present complex information in a clear and concise manner to different groups. Skills will be developed in verbal and non-verbal communication, preparation and presentation of documents/reports/PPTs. Skills of interpersonal communication and ability to work with diverse population groups, able to use ICT in a variety of learning situations, demonstrate ability to access, evaluate, and use a variety of relevant information sources and develop digital literacy as applicable to the professional needs will also be developed.
3. **Critical Thinker and Problem Solver:** Ability to employ critical thinking and efficient problem solving skills through development of new strategies are expected attributing factors.
4. **Sense of Inquiry:** Capability for asking relevant/appropriate questions relating to the issues and problems in the field of physical education, fitness and rehabilitation.
5. **Leadership:** The orientation in organization of health and sports promoting physical activities develops appropriate leadership capabilities in the students.
6. **Skilled Manager:** Capable of identifying or mobilizing appropriate resources required for organizing fruitful training and coaching programme for athletes of various sports.
7. **Digitally Literate:** Capable of using computer for keeping the health related data base of the trainees. Formulating appropriate training programme for individuals as per their need. Capable of employing modern library search tools to locate, retrieve, and evaluate Physical Education & Sports related information.
8. **Ethical Awareness and Reasoning:** Avoiding unethical behavior and promoting fair play. Discouraging the use of drugs for performance enhancement. Promoting sports for the development of all round personality of the participants.
9. **Lifelong Learners:** Capable of self-paced and self-directed learning aimed at personal development.
10. **Pursuit of Excellence:** To have a positive attitude towards developing one's own potentials (both biological & cultural) and talents.
11. **Respect for Diversity:** An empathy with other's views and needs as well as respect for their elder's opinion, race or religion and also able to value different cultures and traditions.
12. **Sense of Justice and Equity:** To able to recognize social justice and act justly; to have a sense of fairness in life especially in sporting situation.
13. **Cooperation and Team Work:** Ability to work effectively and respectfully with diverse teams; facilitate cooperative or coordinated effort on the part of a group and or a team in the interests of a common cause and work efficiently as a player.



Physical Education and Sports

SEMESTER -V

Course Type – MAJOR -9

Course Code: A/PHES/501/MJC-9

Course Title: TEST, MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION AND SPORTS

Total Marks = 50 {Theory Marks: 40: Internal Assessment: 10}

Contact Hours per week: 4 (4 Credits)

Examination Duration: 2 hours

COURSE OUTCOMES-

- 1) Describe assessment and evaluation definitions and related terminologies and discuss their relationship.*
- 2) Indicate and organise the steps of programme development and discuss the role of measurement and evaluation in this process.*
- 3) Illustrate valid and reliable tests that measure various components of physical fitness and sport.*
- 4) Create appropriate assessments for formative and summative evaluation of student/athlete achievement.*
- 5) Demonstrate thorough planning for test administration to ensure the collection of valid data in physical education and sport.*

THEORY PART: (Total Marks -40)

UNIT-I: INTRODUCTION

- 1.1 Meaning and Definition of Test, Measurement and Evaluation in Physical Education & Sports, Relationship among Test, Measurement and Evaluation.
- 1.2 Need and Importance of Test, Measurement & Evaluation in Physical Education & Sports.
- 1.3 Type of Tests- Standard test and Teacher made test, Subjective test and Objective test.
- 1.4 Criteria for selecting tests: Scientific authenticity (Reliability, Validity, Objectivity & Norms), Administrative feasibility and Educational application.
- 1.5 Meaning, Definition and Difference between Physical Fitness and Motor Fitness test, Principles of Evaluation.

UNIT-II: PHYSICAL FITNESS TEST ITEMS AND MEASUREMENT

- 2.1 AAHPER Youth Physical Fitness Test.
- 2.2 Harvard Step Test.
- 2.3 Cooper 12 Minute Run and Walk Test.
- 2.4 Philips J.C.R Test
- 2.5 Yo-Yo Endurance Test

UNIT-III: MOTOR FITNESS TEST ITEMS AND MEASUREMENT

- 3.1 Indiana Motor Fitness Test.
- 3.2 Oregon Motor Fitness Test.
- 3.3 Kraus Weber Minimum Muscular Fitness Test.
- 3.4 Newton Motor Ability Test
- 3.5 Tuttle Pulse Ratio Test

**UNIT- IV: MEASUREMENTS OF SPORTS SKILLS**

- 4.1 McDonald Soccer Skill Test.
- 4.2 Russell-Lange Volleyball Test.
- 4.3 Lockhart and Mc Pherson Badminton skill Test.
- 4.4 Johnson Basketball Test
- 4.5 S.A.I. Hockey Test

QUESTION PATTERN

END SEMESTER EXAMINATION				Internal Marks	Total Marks
Descriptive Type					
NUMBER OF QUESTIONS TO BE ANSWERED			TOTAL	10	50
02 Mark Question	05 Marks Question	10 Marks Question			
5 Out of 8	4 Out of 6	1 Out of 2			
02X5 = 10	05X4 = 20	10X1 = 10			

SUGGESTED READINGS:

1. Bangsbo, J. (1994). *Fitness training in football: A scientific approach*. Bagsvaerd, Denmark.
2. Barron, H.M. & Mcchee, R. (1997). *A Practical approach to measurement in Physical Education* Philadelphia: Lea and Febiger.
3. Kansal, D.K. (1996). *Test and Measurement in Sports and Physical Education*. New Delhi.
4. Mathews, D.K., (1973). *Measurement in Physical Education*, Philadelphia: W.B. Saunders Company.
5. Pheasant, S. (1996). *Body space: Anthropometry, Ergonomics and design of work*. Taylor & Francis, New York.
6. Phillips, D. A., & Hornak, J. E. (1979). *Measurement and Evaluation in Physical Education*. New York: John Willey and Sons.
7. Authors Guide (2013) *ACSM's Health Related Physical Fitness Assessment Manual*, USA: ACSM Publications
8. Collins, R.D., & Hodges P.B. (2001) *A Comprehensive Guide to Sports Skills Tests and Measurement* (2nd edition) Lanham: Scarecrow Press.
9. Krishnamurthy (2007) *Evaluation in Physical Education and Sports*, New Delhi; Ajay Verma Publication.
10. Yobu, A (2010), *Test, Measurement and Evaluation in Physical Education in Physical Education* New Delhi; Friends Publications



Physical Education and Sports

SEMESTER -V

Course Type – MAJOR -10

Course Code: A/PHES/501/MJC-10

Course Title: SPORTS MEDICINE, PHYSIOTHERAPY AND REHABILITATION

Total Marks = 50 {Theory Marks: 40: Internal Assessment: 10}

Contact Hours per week: 4 (4 Credits)

Examination Duration: 2 hours

COURSE OUTCOMES-

1. To Know the role of sports medicine for sports performance
2. To know about adverse effects of doping in sports
3. To create the awareness regarding research in the field of sports medicine
4. To know about various technique for relaxation of sports person
5. To Know about the various therapy for sports injuries

THEORY PART: (Total Marks - 40)

UNIT- 1: SPORTS MEDICINE

- 1.1 Meaning and Definition of Sports Medicine, Aim and Objectives of Sports Medicine.
- 1.2 Development of Sports Medicine as a discipline, Aspect of Sports Medicine.
- 1.3 Meaning and Definition of Sports injuries prevention, symptoms, diagnosis and management of Common Sports Injuries - Sprain, Strain, Fracture, Dislocation, Frozen Shoulder, Tennis Elbow, Shin Splint, Blister, Abrasion, Laceration, Haematoma .
- 1.4 Concept of Doping and Doping Agents Banned by WADA.

UNIT- 2: PHYSIOTHERAPY

- 2.1 Physiotherapy: Meaning, definition and history
- 2.2 Need and Importance of Physiotherapy in Physical Education & Sports
- 2.3 Therapeutic modalities: cryotherapy, hydrotherapy, superficial thermo therapy, penetrating thermotherapy, electrical stimulation
- 2.4 Guiding principles of therapeutic modalities in Physical Education & Sports

UNIT- 3: ATHLETIC INJURIES - CARE AND MASSAGE

- 3.1 Meaning, Definition of athletic injuries- Causes of Athletic Injuries, steps of prevention, pre- & post-participation evolution.
- 3.2 Principles of injury prevention, Concept of safety measures in games/ sports.
- 3.3 Protective and supportive equipment: Taping, Bandaging, padding and orthotics
- 3.4 Massage: Classification- (Stroking, Kneading, Petrissage, Friction, Percussion, Vibration, Shaking) general principles, indications and contraindications

**UNIT-4: REHABILITATION**

- 4.1 Concept and goal of rehabilitation.
- 4.2 Principle of therapeutic exercises- Classification, uses of therapeutic exercises.
- 4.3 Passive movement (Relaxed, Forced and passive stretching) and active movement (concentric, Eccentric and static).
- 4.4 Free Mobility Exercise for Shoulder, Wrist, Fingers, Hip, Ankle, Foot joints and Neck exercises.

QUESTION PATTERN

END SEMESTER EXAMINATION				Internal Marks	Total Marks
Descriptive Type					
NUMBER OF QUESTIONS TO BE ANSWERED			TOTAL		
02 Mark Question	05 Marks Question	10 Marks Question			
5 Out of 8	4 Out of 6	1 Out of 2	40	10	50
02X5 = 10	05X4 = 20	10X1 = 10			

SUGGESTED READINGS:

1. Christine, M.D.,(1999). *Physiology of sports and exercise*. USA: Human Kinetics.
2. Conley, M. (2000). *Bioenergetics of exercise training*. In T.R.Bechle, &R.W.Earle, (Eds.), *Essentials of Strength Training and Conditioning* (pp. 73-90). Champaign, IL: Human Kinetics.
3. David, R.M.(2005). *Drugs in sports*, (4th Ed). Routledge Taylor and Francis Group.
4. Hunter, M.D.(1979). *A dictionary for physical educators*. In H.M.Borrow&R. McGee, (Eds.), *A Practical approach to measurement in Physical Education* (pp.573-74). Philadelphia: Lea &Febiger.



Physical Education and Sports

SEMESTER – V

Course Type – MAJOR -11

Course Code: A/PHES/501/MJC-11

Course Title: INCLUSIVE PHYSICAL EDUCATION & SPORTS AND FIRST AID MANAGEMENT

Total Marks = 50 {Theory Marks: 25: Practical Marks: 15 Internal Assessment: 10}

Contact Hours per week: 5 (3+1) Credits)

Examination Duration- 1:15 Hours

COURSE OUTCOMES-

- 1) *Understand the value and importance of Inclusive Physical Education*
- 2) *The knowledge would enable the students to understand the activity requirements of various levels of physically challenged persons.*
- 3) *The knowledge would thus enable the students to prepare and organize worthwhile activity programs for various levels of physically challenged persons.*
- 4) *Learn how to prevent medical emergencies from occurring.*
- 5) *Learn all of the steps that need to be taken prior to delivering care during a medical emergency.*
- 6) *Learn how to assess a victim during a medical emergency to determine what care is needed*

THEORY PART: (Total Marks -25)

UNIT-I: INTRODUCTION

- 1.1 Meaning and Definition of Inclusive Physical Education and Sports
- 1.2 Aims, Goals and Objectives of Inclusive Physical Education and Sports
- 1.3 Principles of Inclusive Physical Education and Sports, Role of Assistive Devices and Technology in Inclusive Physical Education and Sports
- 1.4 Need and Importance of Inclusive Physical Education and Sports

UNIT-II: CLASSIFICATION OF SPECIAL NEEDED PEOPLE

- 2.1 Physical special needs (Amputation and Spinal-Cord injuries) and related Inclusive Activities
- 2.2 Mental retardation (Mild, Moderate, Severe and Profound) causes and related Inclusive Activities
- 2.3 Visual impairment (Blindness and Low Vision) and related Inclusive Activities
- 2.4 Hearing Impairment (Deafness and Hard of Hearing) and Related Inclusive Activities

UNIT-III: FIRST AID MANAGEMENT

- 3.1 Meaning and Definition of First Aid, Aims and objectives of First Aid, Need and Importance of First Aid in the present day
- 3.2 Immediate care and injuries -P.R.I.C.E, Artificial Respiration, CPR
- 3.3 First Aid Management of Electric Shock, Snake Bite, Drowning, Heart Attack, Burn and Sugar Fall, Low & High Blood Pressure, Choking, Sun Stroke, Frost Bite, and Animal Bites (e.g. Dog and Cat)
- 3.4 Sports injuries and their first aid -Sprain, Strain, Dislocation, Wound, Bleeding and Different types of Fracture



PRACTICAL PART: (Total Marks -15) (Preparation of Record Book is Compulsory which will be evaluated by Internal and External Examiners both)

UNIT -I: VARIOUS MEASUREMENTS/ DETERMINATIONS

- 1.1 Measurement of Body Mass Index
- 1.2 Measurement of Body Fat – Biceps, Triceps, Sub Scapular and Supra Iliac sites (Skinfold Callipers Method)
- 1.3. Measurement of Waist-Hip Ratio (WHR)
- 1.4. Measurement of Basal Metabolic Rate (BMR)
- 1.5. Determination of Caloric Value of Food

UNIT – II: FIRST AID

- 2.1 Use of Triangular Bandage, Roller Bandages, Tube Bandages, Adhesive bandages, Liquid Bandages, crepe bandage and tourniquet bandage
- 2.2 Concept and Practice of Slings with Bandage - Arm Sling, Collar & Cuff Sling
- 2.3 Practice of Bandaging - Simple Spiral, Reverse Spiral, Figure of Eight, Spica.
- 2.4 Practice of knot – Square knot & Reef Knot
- 2.5 Practice of Bandaging on Finger (Hand), Wrist, Elbow, Knee, Ankle, Head
- 2.6 Triangular Bandage, Sling (Arm and Collar sling), Roller Bandage

QUESTION PATTERN

END SEMESTER EXAMINATION				Internal Marks	Prac. Marks	Total Marks
Descriptive Type						
NUMBER OF QUESTION TO BE ANSWERED			TOTAL			
01 Mark Question	05 Marks Question	10 Marks Question				
5 Out of 8	2 Out of 4	1 Out of 2	25	10	15	50
01X5 = 05	05X2 = 10	10X1 = 10				

For External Examination Purpose Only:

1. Any Two Items from Unit -I among which one item selected of his/her best choice by the Examinee and one item suggested by the External Examiner= 5 Marks
2. Any Two Items from Unit -II among which one item selected of his/her best choice by the Examinee and one item suggested by the External Examiner= 5 Marks
3. Record Book – 3 Marks
4. Attendance -2 Marks

Guideline for Record Book – Content of Record Book- Explain details of procedure of various Measurements / Determinations from Unit -I and First aid techniques from Unit -II with necessary diagrams.

SUGGESTED READINGS:

1. Thakur, S. Krira Chikitsa, Paschimanga Rajya Pustak Parsad.
2. Kar, S. (2018). Mahavidyalayer Sarirsiksha: Health Education and First Aid: Classique Books, Kalkata
3. First Aid Manual, (6 Jul 2016), DK; Tenth - Revised edition, ISBN-10: 0241241235
4. H.H. Clark & "Development and Adapted Physical Education" Englewood, Prentice Hall 1964.
5. D.H. Clark, A.S. Daniels "Adapted physical Education" New York Harpers & Brothers 1972.
6. G.T. Stafford, "Prevention & Corrective Physical Education" 4.J.L. Rathoone, "Corrective Physical Education" Philadelphia W.B. Saunders Co. 1968.
7. V.V. Hunt, "Recreation for the Handicapped" Prentice Hall inc., 1974
8. B.J. Cratty, Adapted Physical Education in the main stream love Publishing Company, Denver Colorado 80222. 1989



Physical Education and Sports

SEMESTER -V

Course Type – MAJOR -12

Course Code: A/PHES/501/MJC-12

Course Title: GROUND MARKING AND LAB PRACTICAL**Total Marks = 50** {Theory Marks: 00: Practical Marks: 40 Internal Assessment: 10}

Contact Hours per week: 8 (4 Credits) Examination Duration: N.A.

COURSE OUTCOMES-

- 1) *Identify and comprehend the layout and measurements of various sports fields and courts*
- 2) *Utilize appropriate tools and techniques to accurately mark sports fields*
- 3) *Ensure that the field markings adhere to safety and regulatory standards*
- 4) *Gain hands-on experience in setting up sports venues, enhancing organizational skills*
- 5) *Conduct appropriate fitness tests to assess students' fitness levels*
- 6) *Maintain detailed records of practical activities, including fitness assessments and skill development progress.*
- 7) *Demonstrate proficiency in a chosen sport or game, including understanding its rules and techniques.*

PRACTICAL PART: (Total Marks -40) (Preparation of Record Book is Compulsory which will be evaluated by both Internal and External Examiners)

UNIT-I: GROUND MARKING TECHNIQUES, PRACTICAL APPLICATIONS AND MAINTENANCE

- 1.1 Preparation of the Ground: Clearing the area, ensuring flatness and smoothness of the playing surface, checking for obstacles and removing any debris
- 1.2 Measuring and Marking: Correctly measuring distances for accurate placement of lines and zones. Marking lines (straight and curved), and setting up Goalposts, Poles, Net and Poles, Freezone, Stop board, Take-off Board, Border of Track, Boundaries, Fencing, Use of string lines and stakes for precise measurements. Use of Technology and machines in the marking Process.
- 1.3 Practical Demonstration: Marking of different sports grounds by groups of students
 - a) Football, Volleyball, Netball, Handball
 - b) Kho-Kho, Kabaddi, Badminton, Table tennis
 - c) Cricket, Hockey, Basketball, Throwball
 - d) Track Marking and Field (Jumping, Throwing Events) Marking
- 1.4 Re-Marking and Maintenance: Refresh markings and maintenance of play area (Aesthetics, Longevity and Safety)

UNIT-II: LAB PRACTICAL

- 2.1 **Biomechanics and Kinematics Lab:** Analyze body movements in sports, Use video analysis or motion capture tools to study the mechanics of running, jumping, or throwing in sports, Analyze the joint angles, forces, and acceleration during a sprint or jump.

**2.2 Fitness Assessment in Lab:**

- a) Cardiovascular Endurance: Beep Test, Cooper's 12-Minute Cycle Test
- b) Muscular Strength: Push-ups, sit-ups, squats, Standing Broad Jump
- c) Flexibility: Sit and Reach Test, Goniometer
- d) Agility: Shuttle Run Test

2.3 Sports Psychology Assessment in Lab:

- a) Questionnaires and Surveys: Use of psychological Questionnaires, Criteria and Searching of proper Psychological Questionnaires, printed or digital questionnaires for assessing mood, stress levels, anxiety, mental readiness, self-esteem, self-concept, personality and motivation.
- b) Visualization and Electronic Tools: Use of Various Visualization and Electronic Tools for assessing Concentration, Attention, Confidence, Decision making, Use of Stopwatch in different perspectives.

For External Examination Purposes Only:

1. Any one ground Marking from each part of 1.3 (One From 1.3 a), One From 1.3 b), One From 1.3 c) and One From 1.3 d)) has to be done by the choice of External Examiner = 5X4=20 Marks
2. Any one item from each part of Unit -II (One from each part i.e. 2.1, 2.2, 2.3) should be selected of his/her best choice by Examinee 5x3 = 15 Marks
3. Record Book – 5 Marks

Guideline for Record Book – Content of Record Book- Explain details of procedure for any Five Ground preparation, markings and procedure of five Lab Practical as per the student's own choice with necessary diagram.

SUGGESTED READINGS:

1. *Layout and Marking of Track And Field*, Dr. N. Govindarajulu, Dr. Rakesh Gupta, Friends Publication (India), New Delhi -110002
2. *Playing Fields Manual: Handbook of Planning, Construction, and Maintenance*", Authors: Anil Kumar Vanaik & Daljinder Singh Kahlon, Publisher: Friends Publications Teaching Athletics, Dr. O.P. Gahlawat, Friends Publication (India), New Delhi, 110002.
3. *Games and Sports, Athletic Track & Court Marking Handbook*, Rajesh Agola, www.physicalliteracykurnool.com
4. *Book of Rules of Games and Sports*, National Council of YMCAs of India, Department of Communication, Bharat Yuvak Bhavan, Jai Singh Road, New Delhi- 110001
5. *Handbook of Physical Education And Sports*, J. Krishna Murti, Commonwealth Publishers, Ansari Road, Dariya Ganj, New Delhi- 110002
6. *Physical Education Lab Manual*, Rajeev Singh & Jai Singh Thakur, Publisher: Arihant Publications India Limited, 24-26, Kalindi Colony, Transport Nagar, Meerut, Uttar Pradesh – 250002
7. *Comprehensive Physical Education Lab Manual*, Dr. J.P. Sharma, Laxmi Publications (P) Ltd, 113, Golden House, Daryaganj, New Delhi – 110002



Physical Education and Sports SEMESTER - VI

Course Type – MAJOR -13

Course Code: A/PHES/601/MJC/13

Course Title: SPORTS PSYCHOLOGY AND SPORTS SOCIOLOGY**Total Marks: = 50 (Theory Marks: 40: Internal Marks (Theory: 10)****Contact Hours per week: 4 (4 Credits) Examination Duration: 2 Hours****COURSE OUTCOMES-**

1. *Understand the Concept and Scope of Sports Psychology and Analyze Psychological Factors Affecting Performance*
2. *Apply Techniques for Mental Training and Promote Positive Attitudes and Sportsmanship*
3. *Understand the Relationship Between Society and Sports and Examine the Socialization Process in Sports*
4. *Evaluate the Role of Sports in Social Change and Address Social Issues in Sports*
5. *Develop a Sociological Perspective on Sports Policies*

THEORY PART: (Total Marks - 40)**UNIT – I: INTRODUCTION TO SPORTS PSYCHOLOGY**

- 1.1 Meaning, Definition, and Nature of General and Sports Psychology
- 1.2 Scope of Psychology and Sports Psychology
- 1.3 Need for Knowledge of Sports Psychology in the Field of Physical Education and Sports
- 1.4 Role of Sports Psychology in the Growth and Development of body and mind. Importance of Sports in Modern Society.

UNIT – II CONCEPTS OF PSYCHOLOGICAL TRAITS

- 2.1 Meaning, Definition and Principles of Learning, Meaning, Definition and Types of Motivation, Development of Motivation, Role of Motivation in Sports Performance
- 2.2 Laws and Theories of Learning, Transfer of Learning. Definition of Stress and Anxiety, types of Stress and Anxiety, Definition and types of Emotion, and effects of Stress, Anxiety, and Emotion on Sports Performance.
- 2.3 Meaning and Definition of Personality, Factors Affecting Personality. Characteristics of Personality, Dimension of Personality.
- 2.4 Development of Personality through Physical Education and Sports, Relationship of Personality with Sports Performance.

UNIT -III SOCIOLOGY OF SPORTS AND SOCIALIZATION

- 3.1 Meaning and Definition of Sports Sociology.
- 3.2 Social function of sports, Socialization through Physical Education and Sports
- 3.3 Social theories of sports, functional theory, conflict theory, critical theory, feminist theory
- 3.4 Sports and Politics, Sports and Media, Sports and Education, Change in Sports due to Commercialization, Role of Media in Promoting Sports

UNIT -IV PSYCHO-SOCIAL ASPECT OF SPORTS

- 4.1 Psycho-Social aspect of man in relation to Physical Education and Sports.
- 4.2 Biological Basis of Human Behavior, Individual Differences
- 4.3 Gender and Sports, Equity issues and cultural issues for participation in sports
- 4.4 Heredity and Environment – meaning, definition and their role in the field of Physical Education and Sports. Play, Theories of Play, Differences among Play, Sports and Games.

QUESTION PATTERN

END SEMESTER EXAMINATION Descriptive Type				Internal Marks	Total Marks
NUMBER OF QUESTION TO BE ANSWERED			TOTAL		
02 Mark Question	05 Marks Question	10 Marks Question			
5 Out of 8	4 Out of 6	1 Out of 2	40	10	50
02X5 = 10	05X4 = 20	10X1 = 10			

SUGGESTED READINGS:

1. Ball, D. W. & Loy, J. W. (1975). *Sport and social order; Contribution to the sociology of sport*. London: Addison Wesley Publishing Co., Inc.
2. Blair, J. & Simpson, R. (1962). *Educational psychology*, New York: McMillan Co. Cratty, B.
3. J. (1968). *Psychology and physical activity*. Eaglewood Cliffs. Prentice Hall.
4. Kamlesh, M. L. (1998). *Psychology in physical education and sport*. New Delhi: Metropolitan Book Co.
5. Loy, J. W., Kenyon, G. S. & McPherson, B. D. (1978). *Sports and social system*. London: Addison Wesley Publishing Company Inc.
6. Loy, J. W., Kenyon, G. S. & McPherson, B. D. (1981). *Sports culture and society*.
7. Philadelphia: Lea &Febiger.
8. Mathur, S.S., (1962). *Educational Psychology*.Agra.Vinod Pustak Mandir. Skinner, C. E., (1984.). *Education psychology*. New Delhi: Prentice Hall of India.
9. William, F. O. & Meyer, F. N. (1979). *A handbook of sociology*. New Delhi: Eurasia Publishing House Pvt Ltd.
10. Ball, Donald, W. and Lay John W. *Sport and Social order Contribution to the Sociology of Sport*.
11. Jain. (2002), *Sports Sociology*, Heal Sahety Kendre Publishers.
12. Jay Coakley. (2001) *Sports in Society – Issues and Controversies in International Education*, Mc-Craw Seventh Ed.
13. Richard, J. Crisp. (2000). *Essential Social Psychology*. Sage Publications.
14. Thelma Horn. (2002). *Advances in Sports Psychology*. Human Kinetic.



Physical Education and Sports SEMESTER - VI

Course Type – MAJOR -14

Course Code: A/PHES/601/MJC/14

Course Title: **COMPUTER APPLICATIONS AND AI IN PHYSICAL EDUCATION AND SPORTS**

Total Marks = 50 {Theory Marks: 25: Practical Marks: 15, Internal Assessment: 10}

Contact Hours per week: 5 (3+1 Credits)

Examination Duration- 1:15 Hours

COURSE OUTCOMES-

- 1) *Understand the Fundamentals of Computers and ICT and Utilize Application Software in Physical Education and Sports*
- 2) *Implement Technology in Training Program Design as well as Analyze and Interpret Data Using Computer Applications*
- 3) *Integrate AI in Injury Prevention and Rehabilitation*
- 4) *Explore Ethical and Practical Implications of AI in Sports*

THEORY PART: (Total Marks - 25)

UNIT – I: INTRODUCTION

- 1.1 Define computer. Brief history of the computer and its evolution
- 1.2 Different accessories of the computer and their uses
- 1.3 Importance of computers in the modern-day scenario
- 1.4 Different uses of computers in the field of Physical Education and Sports

UNIT – II CONCEPTS OF COMPUTER APPLICATIONS

- 2.1 Concept of Hardware, Software, Operating System and Anti-Virus
- 2.2 Different functions of Keyboard keys – Ctrl, Shift, Caps Lock, Enter, Delete, Backspace, Arrow key, Esc key, Function of Mouse: Right Click, Left Click, Single Click, Double Click, Scrolling
- 2.3 Use of different software related to Physical Education and Sports:
 - a) Performance Analysis – Kinovea, Longo Match
 - b) Fitness Analysis – Google Fit, MyFitnessPal
 - c) Coaching and Teaching tools – TeamSnap, SportsEasy
 - d) Research and Statistical Analysis – SPSS, 'R' (Open Source)
- 2.4 Internet and its uses and importance in the present day

UNIT -III MS OFFICE

- 3.1 MS Word- concept and use, creating, saving, editing a page, inserting documents like tables and pictures, use of margins, use of ruler, different alignments and their uses
- 3.2 MS Excel – Concept and use, creating, saving, editing an Excel sheet, inserting documents like tables and using mathematical formulas, making charts and calculations



- 3.3 MS PowerPoint-Concept and use, creating, saving, editing a slide, inserting documents like: table, pictures, videos and charts, use of custom animation, designing and layout of slides
- 3.4 MS Outlook-Concept and use, compose and send emails, email with attachment with signature, organizing your inbox, calendar and scheduling, create and manage appointments and meetings

UNIT -IV ARTIFICIAL INTELLIGENCE

- 4.1 Concept of Artificial Intelligence
- 4.2 Different uses of A.I
- 4.3 Impact of A.I in Physical Education and Sports
- 4.4 Use of different A.I application- ChatGpt, Grammarly and Duolingo

PRACTICAL PART: (Total Marks - 15)

UNIT – I: MS OFFICE

1. **MS Word**
 - 1.1 Creating, saving and opening a document
 - 1.2 Formatting, page setup, paragraph alignment, spelling and grammar check, printing option, inserting: page number, graph, footnote and notes.
 - 1.3 Drawing table, inserting row and column, deleting row and column
 - 1.4 Draw and insert an image, Set up image
2. **MS Excel**
 - 2.1 Inserting data into Excel sheet
 - 2.2 Creating, saving and opening a worksheet
 - 2.3 Preparing Bar Diagrams
 - 2.4 Format and editing features: Adjusting column width and row height, understanding charts.
3. **MS PowerPoint**
 - 3.1 Creating, saving and opening a PPT. file
 - 3.2 Format and editing features: design, inserting slide number, picture, graph and table.
 - 3.3 Stating slide show, Animations in the slide show
 - 3.4 Preparation of PowerPoint presentations

UNIT – II: INFORMATION TECHNOLOGY

- 2.1 Use a different Browser (Chrome, Firefox), Web Browsing, searching academic Information, downloading images/files, saving files from the web
- 2.2 Set Up Internet Connection through (Wi-Fi, Ethernet, Mobile data).
- 2.3 Create a new email account, Composing, sending, replying and attaching files to emails,
- 2.4 Learn to manage the Privacy and Security of the Internet and Social Media, Prepare a sample online project

QUESTION PATTERN

END SEMESTER EXAMINATION				Internal Marks	Prac. Marks	Total Marks
Descriptive Type						
NUMBER OF QUESTION TO BE ANSWERED			TOTAL			
01 Mark Question	05 Marks Question	10 Marks Question				
5 Out of 8	2 Out of 4	1 Out of 2	25	10	15	50
01X5 = 05	05X2 = 10	10X1 = 10				

**For External Examination Purpose Only:**

1. Any Two Items from Unit -I among which one item selected of his/her best choice by the Examinee and one item suggested by the External Examiner= 5 Marks
2. Any Two Items from Unit -II among which one item selected of his/her best choice by the Examinee and one item suggested by the External Examiner= 5 Marks
3. Digital Project – 5 Marks

SUGGESTED READINGS:

1. Sinha, P. K. & Sinha, P. (n.d.). Computer fundamentals. 4th edition, BPB Publication.
2. Milke, M. (2007). Absolute beginner's guide to computer basics. Pearson Education Asia.
3. Haggery, T., The Administrative use of computers in professional Sport Organization, New York.
4. Kadu, Ravindra Mahadeorao, (2016), Computer Applications in Physical Education, Sports Publications, ISBN13:9788178799827
5. Chavan, Uday, (2016), Computer Applications in Physical Education, Khel Sahitya Kendra Publisher, New Delhi
6. Kumar, Sandeep (2019) Computer Applications in Physical Education, Sports Publication; First edition, ASIN: B07S81YD55
7. Micael Couceiro, Duarte Araújo, Hugo Sarmento, Keith Davids, Ludovic Seifert, Artificial Intelligence in Sport Performance Analysis, Taylor & Francis
8. Abhijit Thander, Artificial Intelligence: A Modern Approach in Sports Science, Amazon Kindle Edition
9. Dr. J.K. Thakur, Statistics and Computer Application in Physical Education, Sports Publications (2014)
10. Carlo Dindorf, Eva Bartaguiz, Freya Gassmann, Michael Fröhlich, Artificial Intelligence in Sports, Movement, and Health, Publisher: Springer



Physical Education and Sports SEMESTER - VI

Course Type – MAJOR -15

Course Code: A/PHES/601/MJC/15

Course Title: WEIGHT TRAINING, COMBATIVE SPORTS, INDOOR GAMES AND TRADITIONAL ACTIVITY

Total Marks: = 50**(Theory Marks: Nil::Practical Marks: 40::Internal Marks (Theory: 10)****Contact Hours per week: 8 (4 Credits)****Examination Duration: N.A**

COURSE OUTCOMES-

1. Learn effective techniques for defending oneself in various situations.
2. Improve cardiovascular endurance, strength, and agility through training in combative sports.
3. Develop strength, endurance, and flexibility through wrestling training.
4. Develop strategic thinking and problem-solving skills through participation in indoor games
5. Develop an appreciation understanding of traditional practices, customs and values

PRACTICAL PART: (Total Marks -40) (Preparation of Record Book is Compulsory, which will be evaluated by both Internal and External Examiners)

UNIT 1. WEIGHT TRAINING

1. 1. Grips-over-grip, under grip, alternate grasp, starting position- standing, crouch
1. 2. Upright rowing, wrist curl, two arms front curl (dumb-bell, iron bar) and reverse curl, alternate upward arm press (dumb-bell), front and back press (iron bar), bench press (Flat, Incline & Decline), leg press
1. 3. Good morning, back and front squat, split squat, heel raise
1. 4. Core exercises
 - i) Standing exercises (Side leg lift, Knee page, Side squat with knee lift, Alternating reverse lunges, Side lunge, Side squat with knee li and rotation, Quadriceps stretch)
 - ii) Floor exercises (Bridge , Front plank , Side plank , Front plank with knee drops , Opposite arm and leg raise , Modi ed side bridge , Alternating toe taps , Clam , Hamstring stretch)

UNIT 2. COMBATIVE SPORTS

2.1 KARATE

2.1.1 Fundamental skills

- a) Player Stances- Walking, Hand Positions, Front-Leaning, Side-Fighting
- b) Hand Techniques - Punches (Form of a Punch, Straight Punch, and reverse punch), Blocks (Eight basics)
- c) Leg Techniques - Snap Kicks, Stretching Straight Leg, Thrust Kicks, Sidekicks, Roundhouse.
- d) Forms - The first cause Katas, Self Defense - Against punches, grabs and strikes, against basic weapons (knife, club sticks)



- e) Sparring - One step for middle punch, high punch and groin punch. (Defended by appropriate block from eight basic blocks)
- f) Game practice with application of Rules and Regulations
- 2.1.2. Rules and their interpretations and duties of the officials
- 2.1.3. Strategically approach during competition

2.2 WRESTLING

2.2.1 Fundamental skills

- a) Take downs, Leg tackles, Arm drag, Counters for take downs, Cross face, Whizzer series.
- b) Escapes from under-sit-out turn in tripped, Counters for escapes from under-Basic control backdrop, Counters for stand up.
- c) Pinning combination-Nelson series (Half Nelson, Half Nelson and Bar arm), Leg lift series, Leg cradle series, Reverse double bar arm, chicken wing and half Nelson.
- d) Escapes from pinning: Wing lock series, Double arm lock roll, Cridge.
- e) Standing Wrestling-Head under arm series, whizzer series.
- f) Game practice with application of Rules and Regulations.
- 2.2.2 Rules and their interpretations and duties of the officials.
- 2.2.3. Strategically approach during competition.

UNIT 3. INDOOR GAME: CHESS, CARROM

3.1 CHESS

- a) Introduction of chess board and Notation,
- b) Initial Position, Moves, Capture, Pawns.
- c) The King's Special, Features, Check, Checkmate, Casting, Stalemate, Other kinds of Draws
- d) Comparative Value of the Pieces, Method & The time factor,
- e) Strategies, Rules and Regulations
- f) Cognitive benefits: problem-solving, concentration, and decision-making.

3.2 CARROM

- a) Introduction of carom board,
- b) Techniques: flicking, shooting, Seating Position, Striker Grip,
- c) Cut: Normal Cut, Straight Cut, Negative Cut
- d) Shot: Thumb Shot, Double Shot, Third Shot, Front Shot, Rebound, Centre Shot, Straight Shot
- e) Strategies, Rules and Regulations
- f) Benefits: concentration, coordination, and fine motor skills.

UNIT 4. TRADITIONAL ACTIVITY: LATHI & LAZIUM

3.1 LATHI

- a) Introduction of Lathi and various grips -Basic Grip (Standard Grip), Overhand Grip, Underhand Grip, Reverse Grip, Middle Grip (Center Hold), One-Handed Grip, Double-End Grip.
- b) Various Stances: Attention Position, Ready Position, Forward Stance, Backward Stance, Side Stance, Horse-Riding Stance, Low Stance, Cross Stance, Defensive Stance
- c) Technique - Lathi-Sidhi Bel, Ulti Bel, Do Rukh, Beliya, BeliyaChoumukhi, Bagalwar, Jung war, Age Falang, Pichhe Falang

3.2 LAZIUM

- a) Introduction of lazium, Various Hold of Lazium- Basic Hold, One-Hand Hold, Double-Hand Side Hold, Cross Hold, Overhead Hold, Behind-the-Back Hold, Waist-Level Hold, Shoulder-Level Hold
- b) Ghati Lezuim-Char Awaz, AthAwaz, Age Pav, Pav Chakkar, AdhaChakkar, Adhi Baithak, PuriBaithak, Corner
- c) Hindustani (Sadha) Lezuim-Char Awaaz, AthAwaaz, Edi lagav, Pavitra, Age Phalang, Piche Phalang, Do Rukh

For External Examination Purposes Only:

Unit I is Compulsory for all and any one Games/ activity should be selected of his/her best choice by the Examinee from each Unit (i.e. Unit -II – One Game, Unit -III- One game and Unit IV –One Activity)
4X10 = 40 Marks

Guideline for Record Book – Content of Record Book- History, Major Rules Regulation, Description of Major Skills/ Technique (Fundamentals with Picture)

References:

1. Bills, P. (1983). *Sports viewers guide wrestling*. Barcelona Spain: David and Charles Publishers.
2. Gable, D. (1999). *Coaching Wrestling Successfully*. Champaign, USA: Human Kinetics.
3. Keith, A. (1990). *Successful wrestling*. Champaign, USA: Human Kinetics.
4. Mysnyk MD, M., Davis, B., & Simpson, B. (1994). *Winning Wrestling Moves*. Champaign, USA: Human Kinetics.
5. Singh, H. (1996). *Teaching Coaching Modern Wrestling*. New Delhi: Sports Publication.
6. Thomas, R Bacechle. (1994) *Essentials of strength Training and Conditioning*. Human Kinetics.
7. David Sandler. (2003). *Weight training Fundamentals*. Human Kinetics.
8. NSCA.(2008). *Exercise Technique Manual for Resistance Training(2ndEdn)*. Human Kinetics.
9. Frederic Delavier (2010) *Strength training Anatomy(3rdEdn)*. Human Kinetics.
10. Thomas R Baechle and Roger. W Earle .(2006) *Weight Training: step to Success(3rdEdn)* Human Kinetics.



Physical Education and Sports SEMESTER - VI

Course Type – MAJOR -16

Course Code: A/PHES/601/MJC/16

Course Title: OFFICIATING & COACHING IN GAMES & SPORTS AND LEADERSHIP CAMP

**Total Marks = 50 {Theory Marks: 25: Practical Marks: 15 Internal Assessment: 10}
Contact Hours per week: 5 (3+1 Credits) Examination Duration- 1:15 Hours**

COURSE OUTCOMES-

- 1) *Understand the roles, responsibilities, and principles of officiating and coaching in sports.*
- 2) *Recognize the importance of fair play, discipline, and ethical conduct in officiating.*
- 3) *Analyse the relationship between officials, coaches, management, players, and spectators for smooth sports operations.*
- 4) *Explore strategies to improve officiating and coaching standards through training, technology, and rule enforcement.*
- 5) *Understand the duties of a coach before, during, and after competitions, including preparation, strategy, and evaluation.*
- 6) *Learn different coaching philosophies and how they influence leadership, player development, and team success.*
- 7) *Recognize the responsibilities of a coach both on and off the field, including discipline, motivation, and ethical conduct.*
- 8) *Explore the psychology of competition and coaching, focusing on mental preparation, team dynamics, and performance enhancement.*

THEORY PART: (Total Marks - 25)

UNIT-I: INTRODUCTION OF OFFICIATING AND COACHING

- 1.1 Concept of Officiating and Coaching
- 1.2 Importance and principles of Officiating
- 1.3 Relation of official and coach with management, players and spectators
- 1.4 Measures of improving the standards of Officiating and Coaching

UNIT-II: COACH AS A MENTOR AND DUTIES OF OFFICIAL

- 2.1 Duties of coach in general, pre, during and post-game, Philosophy of coaching
- 2.2 Responsibilities of a coach on and off the field, psychological preparation for competition and coaching
- 2.3 Duties of officials in general, pre, during and post-game, Philosophy of officiating
- 2.4 Mechanics of officiating position, singles and movement, Ethics of officiating

UNIT-III: QUALITIES AND QUALIFICATIONS OF COACH AND OFFICIAL

- 3.1 Qualities and qualifications of coach and officials
- 3.2 Eligibility rules of intercollegiate and inter-university tournaments
- 3.3 Preparation of TA, DA bills .
- 3.4 Integrity and values of sports



PRACTICAL PART – 15 Marks (Preparation of Project is Compulsory which will be evaluated by Internal and External Examiner Both)

A. OFFICIATING

- i) Officiating ability in Track and Field
- ii) Officiating ability in any one discipline (Kho-Kho, Kabaddi, Football and Volleyball)

B. EDUCATIONAL LEADERSHIP CAMPING PROGRAM /EXCURSIONS

Minimum 3 days (excluding traveling date) Lead up Camping Program to a nearby feasible place.

- o Concept and meaning of Educational Leadership camp / Excursion
- o Aims and objectives & Types of camp/ Excursion
- o Agencies promoting camp / Excursion
- o Educative value of camp / Excursion
- o Preparing of Project on Camping Programme / Excursion:- Project Report: Project Title, Project Organizer, Project Date, Venue, Introduction, Objective of the Project, Details Daily Activities Report, Project Results, Participant Feedback, Project Conclusion.

QUESTION PATTERN

END SEMESTER EXAMINATION Descriptive Type				Internal Marks	Prac. Marks	Total Marks
NUMBER OF QUESTION TO BE ANSWERED			TOTAL			
01 Mark Question	05 Marks Question	10 Marks Question				
5 Out of 8	2 Out of 4	1 Out of 2	25	10	15	50
01X5 = 05	05X2 = 10	10X1 = 10				

SUGGESTED READINGS:

1. "Sports Officiating and Coaching" by Dr. A.K. Uppal & Dr. J.P. Sharma (Covers fundamentals of officiating, coaching principles, and ethics)
2. "Principles of Sports Training and Coaching" by Dr. A.K. Singh, (Discusses coaching methodologies, officiating standards, and athlete management)
3. "Science of Sports Training & Coaching" by Dr. S.S. Pannu (Focuses on coaching philosophy, psychology, and mentorship in sports)
4. "Modern Coaching and Sports Psychology" by Dr. Rakesh Gupta (Explores mental conditioning, leadership, and competition strategies)
5. "Sports Officiating: Rules and Techniques" by Dr. M.L. Kamlesh (Detailed guide on officiating mechanics, positioning, and ethical conduct)
6. "Ethics and Values in Sports" by Dr. S.K. Sharma (Discusses integrity, fair play, and moral responsibilities in sports)
7. Bunn, J. W. (1972). Scientific principles of coaching. Englewood cliffs N. J. Prentice Hall.
8. Dyson, G. H. (1963). The mechanics of athletics. London: University of London Press Ltd.
9. Singer, R. N. (1972). Coaching, athletic & psychology. New York: M.C. Graw Hill.
10. Brar. T. S. (2002). Officiating techniques in Track and Field, Gwalior. Bhargava Press.
11. De Souza A. J. (1999). Track Geography and Field Sites. Chennai. DBAC Sports Envisions.
12. Mortensen, J. and Cooper J. M. (1963). Track & Field for coach & athlete., Prentice Hall Inc., Englewood Cliffs.

Physical Education and Sports

SEMESTER – V

Course Type – MINOR -5

Course Code: A/PHES/502/MN-5

Course Title: INCLUSIVE PHYSICAL EDUCATION, TEST, MEASUREMENT AND EVALUATION AND GROUND MARKING

Total Marks = 50 {Theory Marks: 25: Practical Marks: 15, Internal Assessment: 10}

Contact Hours per week: 5 (3+1 Credits)

Examination Duration- 1:15 Hours

COURSE OUTCOMES-

- *Understand the value and importance of Inclusive Physical Education*
- *The knowledge would enable the students to understand the activity requirements of various levels of physically challenged persons.*
- *The knowledge would thus enable the students to prepare and organize worthwhile activity programs for various levels of physically challenged persons.*
- *Illustrate valid and reliable tests that measure various components of physical fitness and sport.*
- *Create appropriate assessments for formative and summative evaluation of student/athlete achievement.*
- *Demonstrate thorough planning for test administration to ensure the collection of valid data in physical education and sport.*

THEORY PART: (Total Marks - 25)

UNIT - I INTRODUCTION

- 1.1 Introduction to Inclusive Physical Education and Sports
- 1.2 Meaning and Definition of Inclusive Physical Education and Sports
- 1.3 Aims, Goals and Objectives of Inclusive Physical Education and Sports
- 1.4 Need and Importance of Inclusive Physical Education and Sports

UNIT – II TEST, MEASUREMENT & EVALUATION

- 2.1 Meaning, Definition and Importance of Test, Measurement and Evaluation in Physical Education & Sports, Relationship among Test, Measurement and Evaluation
- 2.2 Type of Tests- Standard test and Teacher-made test, Subjective test and Objective test
- 2.3 Criteria for selecting tests: Scientific authenticity (Reliability, Validity, Objectivity and Norms), administrative feasibility and Educational application
- 2.4 Meaning, Definition and Difference between Physical Fitness and Motor Fitness Test, Principles of Evaluation.

UNIT -III PHYSICAL TEST ITEMS AND MOTOR FITNESS TEST ITEMS

- 3.1 AAHPER Youth Physical Fitness Test
- 3.2 Harvard Step Test, Yo-Yo Endurance Test
- 3.3 Indiana Motor Fitness Test
- 3.4 Oregon Motor Fitness Test, Newton Motor Ability Test

PRACTICAL PART: (Total Marks -15) (Preparation of Record Book is Compulsory which will be evaluated by both Internal and External Examiners)

1. Marking of Track (400m and 200m)
2. Marking of Field Events (Throwing sectors - Discus, Javelin, Shot put and Jumping sectors - Long and High Jump)
3. Marking of Ground/Field - Football, Volleyball, Badminton and Kabaddi

QUESTION PATTERN

END SEMESTER EXAMINATION				Internal Marks	Prac. Marks	Total Marks
Descriptive Type						
NUMBER OF QUESTION TO BE ANSWERED			TOTAL			
01 Mark Question	05 Marks Question	10 Marks Question				
5 Out of 8	2 Out of 4	1 Out of 2	25	10	15	50
01X5 = 05	05X2 = 10	10X1 = 10				

For External Examination Purposes Only:

1. Any one Track Marking - 5, Any one Throwing or Jumping Sector Marking – 5, Any one Ground/ Field Marking -5 will be selected as per the student's own choice

Guideline for Record Book – Content of Record Book–Explain details of procedure for marking Track and any one Jumping Event, any one Throwing event and any one marking of Ground/Field markings which the students choose for their Practical Exam

SUGGESTED READINGS:

1. H.H. Clark & "Development and Adapted Physical Education" Englewood, Prentice Hall 1964.
2. D.H. Clark, A.S. Daniels "Adapted Physical Education" New York Harpers & Brothers 1972.
3. G.T. Stafford, "Prevention & Corrective Physical Education" 4.J.L. Rathoone, "Corrective Physical Education" Philadelphia W.B. Saunders Co. 1968.
4. V.V. Hunt, "Recreation for the Handicapped," Prentice Hall inc., 1974
5. B.J. Cratty, Adapted Physical Education in the main stream love Publishing Company, Denver Colorado 80222. 1989
6. Yobu, A, Test, Measurement and Evaluation in Physical Education in Physical Education and Sports. New Delhi; Friends Publications.
7. John Wiley and Sons, Inc Jenson, Clayne R and Cynt ha, C. Hirst (1980) Measurement in Physical Education and Athletics, New York, Macmillan Publisig Co. Inc.
8. Kansal, D.K. (1996), "Test and Measurement in Sports and Physical Education, New Delhi: DVS Publications.
9. Krishnamurthy (2007) Evaluation in Physical Education and Sports, New Delhi; Ajay Verma Publication.
10. Barry L.Johnson, Jack K.Nelson and Measurements for Evaluation in physical education the surjeet Publications
11. Tritschler K. Barrow & McGee's (2000). Practical Measurement and Assessment. Lippincott Williams & Wilkins. Philadelphia. U.S.A.
12. Mishra Sharad Chandra (2005).Tests And Measurement in physical education. Sports. Delhi
13. Sharma JP (2006). Test and measurements in physical education. Khel sahitya. Delh



Physical Education and Sports

SEMESTER – VI

Course Type – MINOR -6

Course Code: A/PHES/602/MN-6

Course Title: COMPUTER APPLICATION IN PHYSICAL EDUCATION AND SPORTS

Total Marks = 50 {Theory Marks: 25: Practical Marks: 15 Internal Assessment: 10}

Contact Hours per week: 5 (3+1 Credits) Examination Duration- 1:15 Hours

COURSE OUTCOMES-

- *Understand the Fundamentals of Computers and ICT and Utilize Application Software in Physical Education and Sports*
- *Implement Technology in Training Program Design as well as Analyze and Interpret Data Using Computer Applications*
- *Apply basic computer operations and software for data management, documentation, and reporting in sports and fitness contexts.*
- *Utilize video analysis and motion analysis software to evaluate sports techniques and enhance athlete performance.*
- *Analyze and interpret performance data using statistical tools and basic data visualization techniques to support decision-making in sports training and physical education*

THEORY PART: (Total Marks - 25)

UNIT – I: INTRODUCTION

- 1.1 Define computer. Brief history of the computer and its evolution
- 1.2 Different accessories of the computer and their uses
- 1.3 Importance of computers in the modern-day scenario
- 1.4 Different uses of computers in the field of Physical Education and Sports

UNIT – II CONCEPTS OF COMPUTER APPLICATIONS

- 2.1 Concept of Hardware, Software, Operating System and Anti-Virus
- 2.2 Different functions of Keyboard keys – Ctrl, Shift, Caps Lock, Enter, Delete, Backspace, Arrow key, Esc key, Function of Mouse: Right Click, Left Click, Single Click, Double Click, Scrolling
- 2.3 Use of different software related to Physical Education and Sports:
 - a) Performance Analysis – Kinovea, Longo Match
 - b) Fitness Analysis – Google Fit, MyFitnessPal
 - c) Coaching and Teaching tools – TeamSnap, SportsEasy
 - d) Research and Statistical Analysis – SPSS, 'R' (Open Source)
- 2.4 Internet and its uses and importance in the present day

UNIT -III MS OFFICE

- 3.1 MS Word- concept and use, creating, saving, editing a page, inserting documents like: tables and pictures, use of margins, use of ruler, different alignments and their uses
- 3.2 MS Excel – Concept and use, creating, saving, editing an Excel sheet, inserting documents like: tables and using mathematical formulas, making charts and calculations



- 3.3 MS PowerPoint-Concept and use, creating, saving, editing a slide, inserting documents like: table, pictures, videos and charts, use of custom animation, designing and layout of slides
- 3.4 MS Outlook-Concept and use, compose and send emails, email with attachment with signature, organizing your inbox, calendar and scheduling, create and manage appointments and meetings

PRACTICAL PART: (Total Marks - 15)

UNIT – I: MS OFFICE

1. MS Word

- 1.1 Creating, saving and opening a document
- 1.2 Formatting, page setup, paragraph alignment, spelling and grammar check, printing option, inserting: page number, graph, footnote and notes.
- 1.3 Drawing table, inserting row and column, deleting row and column
- 1.4 Draw and insert an image, Set up image

2. MS Excel

- 2.1 Inserting data into an Excel sheet
- 2.2 Creating, saving and opening a worksheet
- 2.3 Preparing Bar Diagrams
- 2.4 Format and editing features: adjusting column width and row height, understanding charts.

3. MS PowerPoint

- 3.1 Creating, saving and opening a PPT. file
- 3.2 Format and editing features: design, inserting slide number, picture, graph and table.
- 3.3 Stating slide show, Animations in the slide show
- 3.4 Preparation of PowerPoint presentations

UNIT – II: INFORMATION TECHNOLOGY

- 2.1 Use of different Browsers (Chrome, Firefox), Web Browsing, searching academic Information, downloading images/files, saving files from the web
- 2.2 Set Up Internet Connection through (Wi-Fi, Ethernet, Mobile data).
- 2.3 Create a new email account, Composing, sending, replying and attaching files to emails,
- 2.4 Learn to manage the Privacy and Security of the Internet and Social Media, Prepare a sample online project

QUESTION PATTERN

END SEMESTER EXAMINATION				Internal Marks	Prac. Marks	Total Marks
Descriptive Type						
NUMBER OF QUESTION TO BE ANSWERED			TOTAL			
01 Mark Question	05 Marks Question	10 Marks Question				
5 Out of 8	2 Out of 4	1 Out of 2	25	10	15	50
01X5 = 05	05X2 = 10	10X1 = 10				

For External Examination Purpose Only:

1. Any Two Items from Unit -I among which one item selected of his/her best choice by the Examinee and one item suggested by the External Examiner= 5 Marks
2. Any Two Items from Unit -II among which one item selected of his/her best choice by the Examinee and one item suggested by the External Examiner= 5 Marks
3. Digital Project – 5 Marks



SUGGESTED READINGS:

1. Sinha, P. K. & Sinha, P. (n.d.) *Computer fundamentals*. 4th edition, BPB Publication.
2. Milke, M. (2007). *Absolute beginner's guide to computer basics*. Pearson Education Asia.
3. Haggery, T., *The Administrative use of computers in professional Sport Organization*, New York.
4. Kadu, Ravindra Mahadeorao, (2016), *Computer Applications in Physical Education*, Sports Publications, ISBN13:9788178799827
5. Chavan, Uday, (2016), *Computer Applications in Physical Education*, Khel Sahitya Kendra Publisher, New Delhi
6. Kumar, Sandeep (2019) *Computer Applications in Physical Education*, Sports Publication; First edition, ASIN: B07S81YD55
7. Dr. J.K. Thakur, *Statistics and Computer Application in Physical Education*, Sports Publications. (2014)
8. Carlo Dindorf, Eva Bartaguiz, Freya Gassmann, Michael Fröhlich, *Artificial Intelligence in Sports, Movement, and Health*, Publisher: Springer