

ORDINANCE
MASTER OF PHYSICAL EDUCATION (M.P.Ed.)
EXAMINATION

Applicability of Regulations for the Time Being in Force

Notwithstanding the integrated nature of a course spread over more than one academic year, the regulations in force at the time a student joins a course shall hold good only for the examinations held during or at the end of the academic year. Nothing in these regulations shall be deemed to debar the University from amending the regulations subsequently and the amendment regulations, if any, shall apply to the entire student whether old or new.

1. The examination for the degree of master of Physical Education (M.P.Ed.) shall be held in two parts to be called Part-I and Part-II and shall be held annually in the month of April/May or on such other dates as may be fixed by university. A supplementary examination for the candidates placed under reappear shall be, held in the month of September or on such other date as may be fixed by the university.
2. The last dates by which admission forms and fees both part-I and Part-II examination should reach the Registrar as the dates notified from time to time.

Annual Examination	Without late fees	With late fee of 500/-	With late fee of Rs. 1000/-	With late fee of Rs. 5000/-	With late fee of Rs. 10,000/-
Regular Candidates	Dec.31	Jan. 12	Jan.21	Feb.10	Feb.21*
Supplementary Examination	July 15	July 31	Aug. 16	Aug. 31	Sep. 7.

* No Examination form will be accepted after this date.

3. The candidate will be required to pay examination fees as prescribed by the University from time to time.
4. The medium of examination, including writing of thesis will be English.
5. The examination will consist of papers according to syllabus as prescribed by the concerned faculty.
6. The option of Dissertation in Part -II can be availed only by those students who have secured at least 55% marks in theory in Part-I.
7. The subject of thesis will be such as is approved by the Board of Studies in Physical Education on recommendation of the Principal /Head of the Department. The last date for:
 - (i) Receipt of application regarding the topic of the thesis along with synopsis shall be October 30 of the year preceding the examination.
 - (ii) When a candidate had failed in the examination but has obtained pass marks in the thesis, the marks obtained in the thesis may be carried forward at his option for the subsequent year.

- (iii) Fee for submission of thesis will be as prescribed by the University from time to time.
- (iv) Receipt of thesis in the office of the Head of the Department shall be one month before the commencement of the theory examination ;in exceptional cases, the Vice Chancellor -shall have the power to extend on the recommendation of the Principal /Head of the Department the last date for receipt of thesis.

PART-I

8. The examination shall be open to any person who:
- (a) has passed one Year * Bachelor's degree examination in Physical Education (B.P.Ed. .) or had passed four year B.P.E. Examination , (B.P.Ed.) after graduation from this University or any other recognized University after 10+2 from this University or any other statutory University.
 - (b) Must have passed English at graduation level.
 - (c) Satisfies the following requirements:
 - i. has been on the rolls of the University/College throughout the academic year preceding the Part-I examination.
 - ii. has his name submitted to the Registrar by the Head of the Department /Principal of the College having attended not less than 75% of the total number of lectures delivered in each paper and 75% of the periods held in practical Map-Work in each paper during the academic year.
 - iii. of having obtained in the house examination held in December /January at least 33% marks in the aggregate of all subjects and 20% marks in each of the subjects prescribed.

In case a candidate could not appear in the house examination owing to unavoidable circumstances or fails to secure the marks indicated and desires to appear in the University Examination as a regular students, the Principals may at his discretion hold a special test for the candidates (s). Such a candidate would be required to obtain at least 33% marks in the aggregate of all subjects and 25% marks in each of the subjects prescribed.

* A student who was debarred for appearing in the examination owing to shortage in the lectures delivered in a subjects(s) shall be permitted to complete his lecturer in the next session and to appear in the examination within the period prescribed in the Ordinances for appearing as late University/College students.

Or

has completed the prescribed course of instruction for the examination, but has not appeared or having appeared has failed and is recommended by the Principal of the college for the admission to such examination without attending a fresh course of instruction within a period of three year from the date of completion of the course.

PART-II

9. The examination shall be open to any person who:
- (a) Satisfies the following requirements:
 - i. has been on the rolls of the University/College throughout the academic year preceding the Part-I examination.
 - ii. has his name submitted to the Registrar by the Head of the Department /Principal of the College having attended not less than 75% of the total number of lectures delivered in each paper and 75% of the periods held in practical Map-Work in each paper during the academic year.
 - iii. of having obtained in the house examination held in December /January at least 33% marks in the aggregate of all subjects and 20% marks in each of the subjects prescribed.

In case a candidate could not appear in the house examination owing to unavoidable circumstances or fails to secure the marks indicated and desires to appear in the University Examination as a regular students, the Principals may at his discretion hold a special test for the candidates (s). Such a candidate would be required to obtain at least 33% marks in the aggregate of all subjects and 25% marks in each of the subjects prescribed.

* A student who was debarded for appearing in the examination owing to shortage in the lectures delivered in a subjects(s) shall be permitted to complete his lecturer in the next session and to appear in the examination within the period prescribed in the Ordinances for appearing as late University/College students.

Or

has completed the prescribed course of instruction for the examination, but has not appeared or having appeared has failed and is recommended by the Principal of the college for the admission to such examination without attending a fresh course of instruction within a period of three year from the date of completion of the course.

10. The minimum number of marks required to pass shall be 35% in each theory paper including the thesis and 40% in the aggregate.
11. The grace marks shall be allowed according to the general ordinances relating to 'Award of Grace Marks' These ordinances will apply to all the examinations.
 - (i) Upto 1% of the total marks of Part-I and II examination shall be added to the aggregate of both Part-I and Part-II examinations to award a higher division/55% marks, to a candidate.
 - (ii) Grace marks to be given shall be calculated on the basis of 1% of total aggregate marks of all the written and practical papers of the examination concerned. Marks for viva-voce internal assessment/ seasonal work/skill in teaching/any additional /optional subject shall not be taken into account for this purpose. If a fraction works out to half or more , it shall count as one mark and faction less than half shall be ignored.
 - (iii) To pass in one or more written papers or subjects, and/ or to make up the aggregate to pass the examination but not in practical ,seasonal work ,internal assessment, viva- voce and skill in teaching.
- 12(a) If a candidate fails in not more than on theory papers subject and secures at least 40% marks in the aggregate of the remaining theory papers/ subjects, he shall be allowed exemption in such papers/ subjects.

A candidate who is provided exception shall be allowed. Provisionally to join the next higher class and the result of the higher class of such a candidate shall be kept in abeyance till he clears the lower examination.

Provided that a candidate placed under Re-appear shall be allowed two subsequent chances to clear the reappear theory failing which his result for the examination will be shown as fail such a candidate will be required to report the course de-novo.
- (b) The candidate will have to pass the M.P.Ed. Examination within the period of four year.
13. Students undergoing a two years integrated master course shall be awarded the Master of Physical Education degree on the basis of their combined scores of Part-I and Part-II examination.

Successful candidates who obtain 75% or more of the aggregate marks in PART-I and PART-II examination, taken together, shall be declared to have passed the examination with distinction and who obtains 60% or more of the aggregate marks shall be placed in first division. Those who obtain 50% or more but less than 60% shall be placed in the second division and all below 50% shall be placed in the third division.
14. A candidate who has passed the Master of Physical Education examination may appear in one more additional papers in which he has not already

passed. The examination fee for appearing in the each paper shall be as prescribed by the University.

15. Four weeks after the termination of the examination, or as soon as may be, the Registrar shall publish a list of candidate showing their result. Each successful candidate of Part-I and Part-II shall be supplied with a card containing his/ her detail of marks.

16. A candidate who has passed Master of Physical Education (M.P.Ed.) examination from this university may be allowed re-appear as a private candidate as a private candidate for improving his/her division score of marks as under:

- (i) A candidate can improve two theory papers in each part, where the course has five papers.
- (ii) A candidate can improve three theory papers in each part., where the course has more than five papers.

For this purpose he/ she will be given two chances within a period of two years from the date of passing the examination.

For the purpose of improvement, under the above ordinance a candidate may appear in both the Part-I and Part-II examination, simultaneously or separately but he must complete the examination within the prescribed period. Such a candidate shall have to submit admission form and fee for each part. Such a candidate shall be allowed to appear in annual examination.

The result of such a candidate shall be declared only if he improves his division/score, otherwise his result will be declared P.R.S. (Previous Result Stands).

Upto 1% of the total marks of Part-I and Part-II examination shall be given to a candidate for passing the examination and also in aggregate of both Part-I and Part-II examination as the case may be to award a higher class 55% marks and also for the purpose of improvement /Division /Score of 55% marks only.

SYLLABUS
MASTER OF PHYSICAL EDUCATION (M. P. ED. II Year)
(ANNUAL SYSTEM)
FOR THE EXAMINATION 2013 & 14

Part-I	Theory	500 marks
Part-II	Officiating and Coaching	100 marks
Part-III	Skill and Prowess	100 marks
		Total: 700 Marks

PART-I THEORY

500 Marks

Paper-I	Sports Psychology	(80+20 Practical)
Paper-II	Sports Medicine	(80+20 Practical)
Paper-II	Exercise Physiology	(80+20 Practical)
Paper-IV	Biomechanics	(80+20 Practical)
Paper-V	Any one of the following	80+20=100

Dissertation/Kin anthropometry

Note: *The norms relating to sessional in each theory paper shall be as under:*

- | | | |
|------|---|---------|
| i) | Tutorials/Assignments/Class test | 8 marks |
| ii) | Participation in seminars & Groups discussion | 7 marks |
| iii) | Attendance | 5 marks |

PART-II OFFICIATING AND COACHING**100 marks****PART-A**

- (i) 10 Supervised coaching & officiating lessons in Games and Note book (25 marks Internal)
- (ii) 10 Supervised coaching & officiating lessons in Athletics and Note book (25 marks Internal)

Principals /HOD will certify that all the requirements pertaining to officiating and coaching have been fulfilled by the candidate.

PART-B**50 marks**
(External & Internal)

- i) Coaching & officiating lesson in games 25 marks
- ii) Coaching & Officiating lesson in Athletics 25 marks

PART-III**100 Marks****PART-A****Skill & Prowess**

- i) Historical development of the concerned game/track and field event.
 - ii) Main tournaments organized at National and International levels
 - iii) Records /Statistics of the games /track and field event at world, Olympics, Asia and National Levels.
 - iv) Awardees in games /Athletics.
 - v) Books and magazines of the game/Track and field.
 - vi) Officiating
- Play area dimensions, Track and field equipment specification.
Rules of the Game, Track and field and their interpretation.
Fundamental Skills/Techniques, Duties of the concerned officials.

Group A Games**50 marks** (10 marks for each games)

- i) Football
- ii) Kabaddi
- iii) Basketball
- iv) Badminton/Table Tennis
- v) Softball

Group B Athletics**50 marks** (10 marks for each games)

- i) Long Jump
- ii) Relay races
- iii) Triple Jump /Pole vault.
- iv) Javelin Throw
- v) Hammer Throw

PAPER-I: SPORTS PSYCHOLOGY

Time: 3 hours

Maximum: 100
(80 External+20 Practical)

INSTRUCTIONS FOR THE PAPER SETTER.

The question paper will consist of five section: A,B,C,D, and E .Sections A,B,C, and D will have two question from respective sections of the syllabus and will carry 15 marks each. Sections E will consist of 10 short-answer type questions which will cover the entire syllabus uniformly and will carry 20 marks. Candidates are required to attempt one question each from the sections A, B, C, and D and the entire section E.

SECTION -A

- 1 Sports Psychology: Meaning, Contents, Focuses and need of Psychological preparation of Athlete.
- 2 Personality: Meaning: Assessment of personality; Dynamic personality; Integration of personality; Factors effecting personality; Athletic performance and personality.

- 3 Motivation: Meaning, type sources; motive, drive need and incentives in motivation; Identification strength and optimal level of sports motivation impact of motivation on Athletic performance.
- 4 Learning: Meaning, Characteristics, law and theories (Conditioning, Trial and Error & Insight learning) and; Transfer of learning in sports; Motor Learning; meaning, principal and conditions.

SECTION –B

- 1 Goal setting behavior and performance: Meaning, importance principle, interventions and mistakes in goal setting; Goal setting program and performance in Sports. Level of aspiration:-
Meaning; Development and determination of level of aspiration.
- 2 Attention and concentration: Meaning, Types and determination of attention and concentration. Strategies to improve attention and concentration in sports.
- 3 Group Dynamics: Meaning, Characteristics & Types of group; cohesion, co-operation and competition phenomenon in sports.
- 4 Intelligency: Meaning, Characteristics, determination of intelligency, Emotional intelligency, Intelligency and Sports.

SECTION-C

- 1 Emotion:-Meaning, Characteristics, Development patterns and physiology of emotion; control, training and mastery of emotion; Athlete Performance and Emotion.
- 2 Anxiety: Meaning, types, Dimension and precipitation factors; Anxiety in Sports (Precompetition anxiety) its causes and managing strategies.
- 3 Mental Health: Meaning, Characteristics, Factors responsible for poor mental health. ;Defence and adjustment mechanism.
- 4 Relaxation Training: Progressive muscle relaxation, Breathing exercise, Yognidra and Transcendental meditation and Bio feed back training.

SECTION-D

- 1 Stress: Meaning, Dimension, Causes, Symptoms; Stress coping strategies in Sports.
- 2 Aggression: Meaning, Types theories physiological and psychological contents. Aggression and violence among player & audience; management of aggression.
- 3 Adjustment, Frustration and conflict: Adjustment Meaning characteristics and area of adjustment and implication in sports Frustration: Meaning, causes, reaction and implication in sports. Conflict: meaning, types, sources & implication in sports.
- 4 Psychological Management of injury: Athlete reaction to injury (Behavioral, Physical, emotional and cognitive); Kubbler & Ross model of Athlete reaction to injury; psychological management of injured Athletics.

PRACTICAL :

(20 Marks Internal)

1. Galvanized skin Resistance (GSR)
2. Biofeed back Analysis
3. Steadiness Testing
4. Depth Perception Test
5. Electromyography
6. Measurement of Reaction Time

REFERENCE

- 1 Morgan and King: Introduction to Psychology Tata Mc Graw Hill.
- 2 Suinn: Psychology in Sport. Methods and Application, Surjeet Publication.
- 3 Grafiti: Psychology in Contemporary Sports, Prentice Hall.
- 4 Basmajian: Biofeed back.

(PAPER-II): SPORTS MEDICINE

Lecture to be delivered: 100

Max Marks: 100

Time Allowed: 3hours

(80 External+20 Practical)

INSTRUCTIONS FOR THE PAPER SETTER.

The question paper will consist of five section: A,B,C,D, and E .Sections A,B,C, and D will have two question from respective sections of the syllabus and will carry 15 marks each. Sections E will consist of 10 short-answer type questions which will cover the entire syllabus uniformly and will carry 20 marks. Candidates are required to attempt one question each from the sections A, B, C, and D and the entire section E.

Section-A

- i) Sports Medicine: Definition, Objective, importance & scope
- ii) Reaction to injury: Kubler and Ross model of Athletic reaction to injury and psychological management of injured Athlete.
- iii) Sports Injuries: Causes, prevention and management and preparticipation evaluation.

Section-B

- i) Sports emergencies: Management of cardio-pulmonary resuscitation (CPR), shock, Bleeding Frost bite and Heat stroke.
- ii) Bandage: Function, Classification, indication, contraindication, Principles and application.
- iii) Exercise Therapy: For the Bronchial obstruction, Heart diseases & diabetic patient.

Section-C

- i) Cryotherapy and Hydrotherapy: Advantage, method, indications and contraindication, modalities of rehabilitation of sports injuries.
- ii) Electrotherapy and Heat: Modalities, advantage, methods, indications and contraindications modalities of rehabilitation of sports injuries.
- iii) Massages: Techniques, indication, Contraindication and advantages of General massage, Athletic massage and under water massage.

Section –D

- i) Sports Rehabilitation: Definition, aim, objective, scope & principles.
- ii) Sports injuries: Causes symptoms, prevention and treatment of sprain, strain, dislocation and fracture.
 - ii) Common sports injures: Sports injuries of different part of body: Knock out, Punch Syndrome, Wrestler Ear ,Weight Lifter Black out, Stitch at side, Low back pain, Shoulder impingement syndrome, Tennis elbow, Javelin throwers elbow, Boxer elbow, Mallet finger, Runners Knee, Jumper Knee, Shin splint, Turf toe.

PRACTICAL :

(20 Marks Internal)

- 1. First aid
- 2. Bandaging, taping and strapping
- 3. Massage
- 4. Exercise therapy (Post Traumatic Rehabilitation)

References

1. Marcia, K.; Anderson; Susan J. Hall and Malissa, Mortin: Sports Injury Management, Lippincott Williams and Wilkins Philadelphia.
2. G.S. Kang: Sports Medicines, Punjabi University Publication Bureau, Patiala (2002).
3. Morris, B. Mellion: Sports Injuries and Athletic Problem, Surjeet Publication, New Delhi.
4. William, E.; Garrett, Donald; T.I. Kirkcendall and Deborah, L. Squire: Primary Care Sports Medicine, Lippincott Williams and Wilkins, Philadelphia (2001)
5. Philip Mafetone: Complementary Sports Medicine, Human Kinetics, Champaign (1999).
6. Laila Das: Text Book of Sports Medicine, Jaypee Brothers, New Delhi (2006)
7. C.S. Jaya Prakash, Sports Medicine, Jaypee Brothers, New Delhi. (2003)
8. Stuart Porter: Tidy's Physiotherapy, Elsevier Woburn (2005)
9. Mery, V. Laxo : Massage and Medical Gymnastics (1956)
10. Tidy: Massage & Remedial Gymnastics (1976)
11. Joke Ernest, L. : Scope of Exercise Rehabilitation.
12. Horns, Kang, L. : Therapeutic Exercise.

(PAPER III) EXERCISE PHYSIOLOGY

Lecture to be delivered: 120

Max Marks: 100

Time Allowed: 3 hours

(80 External+20 Practical)

INSTRUCTIONS FOR THE PAPER SETTER.

The question paper will consist of five sections: A, B, C, D, and E. Sections A, B, C, and D will have two questions from respective sections of the syllabus and will carry 15 marks each. Section E will consist of 10 short-answer type questions which will cover the entire syllabus uniformly and will carry 20 marks. Candidates are required to attempt one question each from the sections A, B, C, and D and the entire section E.

Section-A

- 1 Exercise Physiology: Meaning, Nature, Scope and Importance of Exercise Physiology in Games and Sports.
- 2 Energy Source: Adenosine tri-phosphate (ATP), Sources of ATP system, (Anaerobic Glycolysis (acid system), Aerobic Glycolysis cycle, The aerobic and Anaerobic systems during rest and Exercise.
- 3 Energy Production: Carbohydrate Metabolism, Fat Metabolism & Protein Metabolism.

Section-B

- 1 Recovery Process: Introduction, Restoration of Muscle Phosphagen Stores, Replenishment of Myoglobin with Oxygen, Restoration of Muscle Glycogen, Removal of Lactic Acid from Muscle and Blood.
- 2 Exercise and Systems: Effect of Exercise on Respiratory, Hormonal, Cardiovascular.
- 3 Exercise and Environment: Effect of exercise on Hot, Cold and High Altitude

Section-C

- 1 Muscle movement mechanism- Sliding filament theory, Types of muscles, Muscular system and exercise.
- 2 Nutrition and Athletic Performance: Nutrition and Training components of diet, Nutrition for competition, Carbohydrate loading, Pre-event meal, feeding during exercise, fluid ingestion during and after exercise.
- 3 Ergogenic agents: Pharmacological agents (Alcohol, Amphetamines, Caffeine, Cocaine, Diuretics, Morphine) Hormonal Agents (Anabolic steroids, Human Growth

Hormone) Blood doping, Oxygen supplementation carbonate loading, phosphate loading.

Section-D

- 1 Exercise and Aging: Physiological changes, Training adaptation in aged, Guidelines for constructing exercise programme.
- 2 Obesity and Health: Precautions, Energy Expenditure, Treatment.
- 3 Exercise and Females: Performance, records, strength, physical trainability and Gynecological disorders

PRACTICAL :

(20 Marks Internal)

- 1.Lung capacity; Spirometry, estimation of VC, FEV, PIF, PEF etc.
- 2.Estimation of heart rate by different methods and its influence
- 3.Estimation of heart rate during match play in different games and its interpretation
- 4.Determination of direct assessment of maximum aerobic capacity
- 5.Electrolyte analysis

Reference

- 1 Mc.Ardle W. D. Katch F.I and Katch V.L.: Exercise Physiology Energy, Nutrition and Human Performance, Williams and Wilins, 1996.
- 2 Wilmor, J. H. and Costil, D. L.: Physiology of Sports and Exercise, Human Kinetics 1994.
- 3 Bowers R. W. and Fox, E .L.: Sports Physiology, Wm.C.Brown Publishers.
- 4 Kalvora Peter: Foundation of Exercise Science, Sports Books Publishers, Toronto 2004.
- 5 Ann Litt. MS. R. D.: Fuel for Young Athletes Human Kinetics, Champaign 2004.
- 6 George A., Brooks, Thomas D Fahey & Timethey P White: Exercise Physiology, Mayfield Publishing Company, Toronto

(PAPER –IV) BIOMECHANICS

Lecture to be delivered: 120

Max Marks: 100

Time Allowed: 3 hours

(80 External+20 Practical)

INSTRUCTIONS FOR THE PAPER SETTER.

The question paper will consist of five section: A,B,C,D, and E .Sections A,B,C, and D will have two question from respective sections of the syllabus and will carry 15 marks each. Sections E will consist of 10 short-answer type questions which will cover the entire syllabus uniformly and will carry 20 marks. Candidates are required to attempt one question each from the sections A, B, C, and D and the entire section E.

Section-A

- i) Biomechanics: Meaning, Scope and importance in Physical Education and Sports.
- ii) Liner Kinematics:
 - Distance and displacement
 - Speed and Velocity, Acceleration.
 - Interrelationship between displacement, velocity and acceleration

- iii) Angular Kinematics:
 - Angular distance & angular displacement.
 - Angular speed, angular velocity and angular acceleration
 - Angular motive vectors

Section-B

- i) Fluid Mechanics: Location of buoyant force, specific gravity, drag force, lift force, gyroscopic action, Surface drag, form drag, Lift, Magnus effect and laws of floating.
- ii) Linear Kinetics:
 - Inertia, Mass, Force and Weight
 - Newton's Law of gravitation
 - Momentum and Impulse.
- iii) Angular Kinetics:
 - Eccentric force, couple, moment of force, torque, moment of inertia and angular momentum.
 - Transfer of angular velocity.
 - Relationship between angular velocity, moment of inertia and angular momentum.

Section-C

- i) Lever, Spin and friction: Meaning, Types, Characteristics and their uses in sports.
- ii) Projectile: Meaning, Horizontal and vertical components, Influence of Air Resistance, factors influencing Trajectory (Projection angle, Projection speed, Projection Height, Projection Conditions).
- iii) Equilibrium: Meaning, Types, Principles and their application in sports

Section-D

- i) Biomechanics of Running, Walking, High Hurdling, Shot Put, Discus Throw, Broad Jump, High Jump and Swimming (Free Style).
- ii) Different Tools and Techniques used for Biomechanical analysis of sports movement.
- iii) Motion: Meaning, Characteristics, Types and Law of motion (Newton's Law)

PRACTICAL :

(20 Marks Internal)

1. Introduction of method and technique of biomechanical analysis
 - I. Photographic method
 - II. Goniometry
 - III. Dynamometry
 - IV. Electromyography
2. Calculation of resultant vector by
 - I. Graphical method
 - II. Trigonometric method
3. Measurement of angles of various joint on stick figure
4. Calculation of centre of gravity by segmentation method

Reference

- 1 Kathryn Luttgens and Nancy Hamilton: KInesiology-Scientific basis of Human Motion, New York, McGraw Hill (2001)

- 2 Susan J Hall: Basic Biomechanics, New York McGraw Hill (1995).
- 3 Peter M. Mc Ginnis: Biomechanics of Sports and Exercise, Human Kinetics, Champaign, USA (2005).
- 4 James G., Hay: The Biomechanics of Sports Techniques (2nd Ed.), Englewood Cliffs, N. J. Prentics Hall, Inc., 1978.
- 5 John W. Bunn: Scientific Principles of Coaching (2nd Ed.) Englewood Cliffs N. J. Prentics Hall Inc., 1972.
- 6 M. G. Scott: Analysis of Human Botton, New York: Application Century Crafts.
- 7 M. R. Broat: Efficiency of Human Movement, Philadelphia W. B. Saunders Co., 1982.
- 8 M. Williams: Bio-Mechanics of Human Motion, Phiuladelphia W. B. Sanunders Co., 1982.
- 9 G. Dyson: Mechanics of Athletics, London, Setughten, 1962.
- 10 G. Hawley: A Anatomical Analysis of Sports, New York A.S. Arner & Co.

(PAPER –V) KINANTHROPOMETRY (OPT-I)

Max Marks: 100

Time Allowed: 3hours

(80 External+20 Practical)

INSTRUCTIONS FOR THE PAPER SETTER.

The question paper will consist of five section: A,B,C,D, and E .Sections A,B,C, and D will have two question from respective sections of the syllabus and will carry 15 marks each. Sections E will consist of 10 short-answer type questions which will cover the entire syllabus uniformly and will carry 20 marks. Candidates are required to attempt one question each from the sections A, B, C, and D and the entire section E.

Section-A

- i) Kinanthropometry: Meaning, Importance and application of Anthropometric data in sports.
- ii) Anthropometric: Meaning importance, scope & classification, working and utility of anthropometric instrument, location of different land marks on the body.

Section-B

- i) Growth:-Meaning, importance, Physical Growth, normal growth in adolescence, growth and motor performance.
- ii) Maturation: Meaning, importance and scope, measurement of maturity and assessment of skeletal maturity.

Section-C

- i) Body proportion: Meaning, importance and sports specific body proportion and indices.
- ii) Body mass index: Meaning, method of determination and importance in sports.

Section-D

- i) Body composition: Meaning, importance, scope, methods of determination estimation of muscle mass, bone mass and fat percentage.
- ii) Somatotyping: Meaning, importance & scope in sports, Sheldon's and health and carter method of somatotyping and classification of somatotype. Somatochart and somatoplot.

Reference

- 1 Sports Anthropolmetry by H. S. Sodhi, Nova Publication.
- 2 Physique and Selection of sportsmen by H. S. Sodhi and L. S. Sidhu.

- 3 Kinanthropometry by S. P. Singh & P. Malthotra, Luna Publication, Patiala.
- 4 Kinanthropometry by Roger Eston and Thomas Reilly, E. & FN SPON, London.
- 5 Skeletal Maturity by S. P. Singh, L. S. Sidhu and J. Singh, Human Biology, Publication Society, Punjabi University, Patiala.
- 6 Genetic and Anthropological studies of Olympic Athletes by De Garry, Louis Levine & Cater, Academic Press, London.
- 6 Human Biology by Harrison et. al. Oxford University Press, Oxford.

PRACTICAL :

(20 Marks Internal)

1. Location of Different Landmarks on the Body.
2. Fat, Muscle and Bone Mass Assessment.
3. Body Mass Index.
4. Plotting of Somato Chart.

(PAPER-V) DISSERTATION (OPT-II)

Lecture to be delivered: 120

Time Allowed: 3hours

Max Marks: 100

(80 External+20 Internal)

The dissertation writing schedule published by publication bureau of Punjabi University, Patiala.

- 1) Introduction
 - Problems and Background
 - Need of the study
 - Delimitations of the study
 - Hypothesis
 - Significance of the study
 - Definitions and Explanation of terms
- 2) Review of the Literature
- 3) Design and procedure.
 - Sample
 - Tools
 - Procedure of data collection
 - Design of the study
 - Statistical procedure
- 4) Discussion & Conclusion
- 5) Summary
- 6) Bibliography.