

DEPARTMENT OF PHYSIOTHERAPY
PUNJABI UNIVERSITY PATIALA
(Established under Punjab Act No 35 of 1961)

Syllabus for Entrance Test for PhD (2021-22)

Section A

1. Research And Biostatistics

- i) Basic principles of research
Scope of research
Characteristics and types of research
Research design
Questionnaires, Surveys & Sampling
Testing hypotheses
Sources of error in research
- ii) Research applications
Attitude scales & Grid analysis
- iii) Brief introduction to biostatistics
Organization of data
Parametric and Nonparametric tests
Correlation

Section B

1. Basic Medical Sciences

Organization and regulation of motor system, control system of body (Motor and sensory) structure and function of cardio vascular, respiratory and endocrinal system

2. Applied Basic Sciences

Basics of radiology with respect to imaging of musculoskeletal system, pathology and pharmacological management of the disorders of Musculoskeletal, Nervous, Cardiovascular and Respiratory systems

3. Biomechanics

Principle, methods and role of Biomechanics and kinesiology in Physiotherapy, biomechanics of upper limb, lower limb, spine, gait analysis

4. Exercise Physiology

Bioenergetics of exercise, nutrition and metabolism , response of exercise to cardio respiratory system, hormonal response to exercise , acid base balance, exercise in metabolic disorders

5. Therapeutics

Principles and methods and advances in exercise therapy, Principles and methods and advances in electrotherapy, Principles, methods and advances in manual therapy, Principles and methods of orthotics and prosthetics

6. Evaluation

Principles and methods of examination of Musculoskeletal, Nervous ,Cardiovascular and Respiratory systems, assessment and documentation, disability evaluation, advanced evaluations tools

7. Treatment Methods

Physiotherapy management of disorders of Musculoskeletal, Nervous, Cardiovascular and Respiratory systems