Faculty of Health Sciences (FOHS)
Syllabus for PhD Entrance Test (PET)

❖ SPORTS SCIENCE AND MANAGEMENT

Unit 1: Anatomy and Exercise Physiology

Unit 2: Kinesiology and Sports Biomechanics

Unit 3: Sports Psychology
Learning Process and Theories of Learning, Personality and Sports, Personality Theories, Motivation – Approaches, Theories, Achievement Motivation and Competitiveness, Feedback, Reinforcement, and Intrinsic Motivation, Arousal, Stress, and Anxiety, Diversity and Inclusion, Team Dynamics and Cohesion, Leadership and Communication, Imagery, Self-confidence, Goal Setting, Aggression, Concentration

Unit 4: Sports Training
Principles of Training, Health Related Physical Fitness, Skill Related Physical Fitness, Training – Strength, Endurance, Flexibility, Speed, Agility, Plyometric, Warmup and Stretching, Training Load, Volume, Intensity, Specificity, Rest Interval, Frequency, Density, Adaptation, Overload, Overtraining, Periodization, Short term plan, Annual Plan, Supercompensation, Detraining and Retraining
Unit 5: Test, Measurement and Evaluation


Unit 6: Sports Management


Unit 7: Sports Nutrition


Unit 8: Physical Activity and Health Promotion


Unit 9: Research and Statistics in Sports


Descriptive Statistics and Inferential Statistics, Central Limit Theorem, Measures of Central Tendency, Measures of Variability, Normality of the Data, Probability, Hypothesis Testing – Types of Hypothesis, Level of Significance, Type 1 and Type 2 Error, Power of the Test, p-value.

Sample Questions:

1. Flexion and extension occur around
2. The red muscle fibres contain
I. High content of glycogen.
II. Higher myoglobin content.
III. Better for aerobic work.
IV. Better for anaerobic work
Find the correct combinations.
Codes:
(A) I and II
(B) I and III
(C) II and III
(D) II and IV

3. Match List – I with List – II and select the correct answer from the code given below:
List – I
I. Inverted U hypothesis
II. Aggression
III. Leadership
IV. Motivation
List – II
1. Achievement
2. Autocratic style
3. Anxiety
4. Instrumental
Codes:
(A) 1 2 3 4
(B) 4 3 1 2
(C) 2 1 4 3
(D) 3 4 2 1