Faculty of Health & Biological Sciences
Syllabus for Entrance Test

❖ SPORTS SCIENCE AND PHYSICAL EDUCATION

Unit 1: Anatomy and Exercise Physiology


Unit 2: Kinesiology and Sports Biomechanics


Unit 3: Sports Psychology


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
   (A) Medio-lateral axis
   (B) Anterior-posterior axis
   (C) Vertical axis
   (D) Sagittal axis

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:
<table>
<thead>
<tr>
<th>I</th>
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<th>III</th>
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<tbody>
<tr>
<td>(A)</td>
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