

**PHYSICAL MEDICINE & REHABILITATION**

**PAPER – I**

Time : 3 hours  
Max. Marks : 100

PMR/D/17/35 /I

**Important instructions:**

- *Attempt all questions in order.*
- *Each question carries 10 marks.*
- *Read the question carefully and answer to the point neatly and legibly.*
- *Do not leave any blank pages between two answers.*
- *Indicate the question number correctly for the answer in the margin space.*
- *Answer all the parts of a single question together.*
- *Start the answer to a question on a fresh page or leave adequate space between two answers.*
- *Draw table/diagrams/flowcharts wherever appropriate.*

Write Short notes on:

1. Write two features, each for differential diagnosis of right wrist drop in a 10 year boy with respect to the anatomical location of pathology. 10
2. Describe open kinetic chain and closed kinetic chain with examples. What are the implications of the above on therapeutic exercises in sports and general rehabilitation? 10
3. Physiology of normal bowel. 10
4. Define neuromuscular junction. Give mechanism of action of three commonly used drugs acting on neuromuscular junction. 4+(2+2+2)
5. Name the scapulohumeral stabilizers and their role in various shoulder movements at the scapulohumeral joint. 10
6. Enumerate the differences between therapeutic and diagnostic ultrasound. 10
7. Write about origin, insertion, nerve supply, anatomical correlations and applied anatomy of 'Piriformis muscle'. 10
8. What is Pedobarography? Write about its role in health and disease. 10
9. What are different phases of swallowing? Describe the clinical evaluation of swallowing disorder. 10
10. Describe different types of Case- Control studies. How do you calculate sample size in a therapeutic trial? How do you calculate the effect of missing data in analysis? 10

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