

**JAMIA HAMDARD
DEPARTMENT OF PHYSIOTHERAPY
SCHOOL OF NURSING SCIENCES & ALLIED HEALTH**

**MPT 1st YEAR ANNUAL EXAMINATION, MAY 2023
ADVANCED DIAGNOSTICS AND THERAPEUTICS (Theory)
PAPER CODE: MTC/M/N/S-163**

Time: 3 hours

Maximum Marks: 75

(Write your Roll No. on top of the paper immediately)

- Note: (i) Attempt ALL questions
(ii) Choices are mentioned wherever applicable
(iii) Parts of a question must be answered together
(iv) Draw diagrams wherever necessary
(v) Give examples wherever necessary*

SECTION- A

Attempt any FIVE (5) out of 6 questions:

5x5=25marks

- Q1. Write a short note on Accelerometer and different methods of measurement of acceleration?
- Q2. What is the application of virtual reality in evidence based research?
- Q3. Write a short note on EMG and NCV?
- Q4. Write a short note on Hydrodynamics and factors affecting it?
- Q5. What are the different types of Potentiometer. Give advantages and disadvantages?
- Q6. What are the factors affecting adherence to an exercise protocol and how it can be increased?

SECTION-B

Attempt any TWO (2) out of 3 questions:

2x10=20marks

- Q1. Write about the different types of electrodes used in application of FES and advantages and disadvantages of each electrode?
- Q2. Describe the scientific foundation for the application of Plyometrics? Write about clinical guidelines for beginning a plyometric program?
- Q3. Write about special considerations of electrotherapeutic modalities for pregnant and menstruating women?

SECTION- C

Attempt any TWO (2) out of 3 questions:

2x15=30marks

- Q1. Compare the evidence based effectiveness of core stabilization and Pilates?
- Q2. Discuss the physiological effects, indications, contraindications and parameters of Russian current application?
- Q3. What is Body Composition Analysis and its benefits? What are the various direct and indirect methods of Body Composition Analysis?
