

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[MPT 0222]

**FEBRUARY 2022
(OCTOBER 2021 EXAM SESSION)**

Sub. Code: 8153

MPT DEGREE EXAMINATION

FIRST YEAR - (Regulations for the candidates admitted from 2018-2019 including 2020-2021)

PAPER I – APPLIED BASIC SCIENCES

Q.P. Code : 278153

Time : Three hours

Answer ALL Questions

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Define research variables. Explain in detail about types, reliability – validity and specificity – sensitivity.
2. Explain in detail about muscle mechanics in static conditions of the hip joint equilibrium.

II. Write notes on:

(10 x 6 = 60)

1. Pathomechanics of scoliosis.
2. Cardiovascular adaptation with aerobic exercise training.
3. Ergonomics and injury prevention.
4. Importance of plyometrics.
5. Sampling Techniques.
6. Energy transfer in fast and slow twitch muscle fibers.
7. Neuro muscular fatigue.
8. Worker functional capacity assessment.
9. Implementing the projects.
10. Curriculum research in physiotherapy.
