



[LL 751]

**OCTOBER 2017**

Sub. Code: 8151

**MPT DEGREE EXAMINATION**  
**(Common to all Branches)**  
**FIRST YEAR**  
**PAPER I – APPLIED BASIC SCIENCES**

*Q.P. Code : 278151*

**Time : Three hours**

**Maximum : 100 Marks**

**I. Elaborate on:**

**(2 x 20 = 40)**

1. Analyze the forces acting on shoulder joint and its pathomechanical variation in Winged Scapula.
2. Discuss about exercise at different altitudes and various climatic conditions.

**II. Write notes on:**

**(10 x 6 = 60)**

1. Role of arm in maintaining body equilibrium.
2. Factors affecting training.
3. Role of physiotherapy in industrial set up.
4. Uses of vital statistics.
5. Nutation and counter nutation.
6. Neuro muscular fatigue.
7. Ergonomical modifications for a software professional.
8. Type I and II Error.
9. Functional adaptation of bone.
10. Plyometrics.

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