



Q.P. Code : 802002

(3 Hours)

[Total Marks : 80

- N.B. :** (1) Question no.1 is **compulsory**
(2) **Attempt** any **three** questions from **remaining**
(3) **Figures** to the right indicate **full marks**.

1. Write short notes on : **20**
 - (a) SACH foot
 - (b) SOMI
 - (c) Anisotropic behaviour of bone
 - (d) Synovial joints - Classification

 2. (a) Explain the steps of PTB fabrication. **10**
(b) Explain the various loading modes of bone. **10**

 3. (a) Define levers and mechanical advantage. Explain different types of levers stating one anatomical example for each. **10**
(b) Explain a typical stress-strain curve. **10**

 4. Explain the human gait cycle in detail with joint angle graphs. **20**

 5. (a) Explain any one lower limb orthosis. **10**
(b) Explain biomechanics of tendons and ligaments. **10**

 6. Write short notes on: (Any **four**) **20**
 - (a) Jaipur Foot
 - (b) Cervical collars
 - (c) Goniometers
 - (d) CTEV
 - (e) Abnormal spinal curvatures
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