SE (Biomed) (son-II)(R) may 2009 Biomechanics. Prosthetic Goothetics

n. 3063-09.

(REVISED COURSE)

[Total Marks: 100 (3 Hours) B.: (1) Question No. 1 is compulsory. Attempt any four questions from the remaining six questions. (2)Figures to the right indicate full marks. (3)Illustrate answers with sketches whenever required. (4) Explain with neat sketches Normal Gait Cycle. Explain each stage with its functional 20 application. (a) What is a lever? Explain the different types of lever with at least two anatomical 15 examples in each type. (b) Draw & explain Synovial joint in detail and list the different types of Synovial joint. 8 (a) Explain Bio Mechanics of Bone. (b) Classify the force system. Explain the principle of three point pressure with 12 at least three examples. Discuss the criteria for providing Spinal Orthosis. List major Spinal Orthosis and 20 describe one of them with diagram. 10 Explain using suitable sketches Below Elbow Prothesis. 10 Explain using suitable diagram HKAFO. (b) 10 Explain Lamination procedure of the PTB. (a) (b) Explain Patient Rehabilitation concept & how it helps the patient. 10 20 Write short notes on: (any four) :— (a) Stress - Strain curve (b) Transducers in P & O (c) Milwaukee Brace (d) Jaipur Foot (e) Terminal devices (f) Stress - Strain curve.