

Con. 6635-11.

MP-4357

(3 Hours)

[Total Marks : 100

- N.B.: (1) Question No.1 is compulsory.
 (2) Attempt any four questions from the remaining six questions.
 (3) Figures to the right indicate full marks.
 (4) Illustrate answers with sketches whenever required.

- Q1)a) Draw and explain the stress strain curve: (05)
 b) Write a note on transducers in prosthetics and orthotics. (05)
 c) Write a note on wrist units, . (05)
 d) Discuss the standard below elbow harness, (05)
- Q2) a) Explain the mechanics of below elbow control system, (10)
 b) Discuss the use of types of metals in prosthesis. (10)
- Q3) a) Compare the biomechanical characterization of tendon and ligament, (10)
 b) Classify different spinal orthosis and describe any two of them giving examples. (10)
- Q4) a) List the deformities of ankle and explain how orthosis is used to correct them> (10)
 b) Define a Lever and Explain different types of lever existing in our body with examples. (10)
- Q5) a) Discuss the Normal Gait Cycle with neat sketches. . (10)
 b) Discuss the biomechanics of a total contact quadrilateral socket. (10)
- Q6) a) Explain lower limb prosthesis using neat diagrams. (10)
 b) Explain Lamination procedure of the PTB (10)
- Q7) Write short notes on: (any four) (20)
 a) Stirrup
 b) Jaipur foot
 c) Biomechanics of skin
 d) 3-point pressure principle
 e) Hooks'

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