Q1 (a) Lever Definition 0.2
3 Types of Levers 0.3
(b)knee at least 5 movements 2.5
Explantation
(c) Prosthetic Knee - Explanation 2.5
Endoprosthesis - Explanation 2.5
(d) Shape Memory Effect - Diagram 2.5
Explantation
(e) Non Dynamic Response Foot 2.5
Single Ami 2.5
Multi Ami 2.5
Q. No.

(a) Equilibrium, Locomotion, Musculoskeletal Integrity, Neurological Control

(b) Gait Cycle - Diagram - Explanation

(c) Deixic Variables

(i) Shank Length

(ii) Width

(iii) Degree of Toe out - Explanation

Q. III

(a) Orthosis - Definition

Principle: Three point pressure diagram and Explanation

(i) Total Contact

(ii) Partial Weight Relieving

(b) SOMI Brace - Diagram - Explanation
Q. IV (a) Explanation: about Ti - Ti based alloys

Application as implant

Properties

(0.4)

(0.3)

(b) Ceramics - Definition

Classification

Application in detail

(0.2)

(0.3)

(0.5)

Q. V (a) In vivo types of biological testing

Explain in points. Cover all the points.

Explanation

(0.5)

(0.5)

(b) Surface Property - Diagram of SIMS

Explanation

(0.5)

(0.5)
9. vi

(a) Explanation, Diagram, Application

(b) Trans-radial prosthetic system - Diagram, Explanation

(c) Biodegradable Polymers - Diagram and Explanation

(d) Synovial joint - Diagram

(e) Corrosion and wear - Diagram, Explanation, Wear - Explanation

Marks

(a) 0.2

(b) 0.3

(c) 0.3

(d) 0.5

(e) 0.5