

- Q.20 Explain the Engineering Concepts in Sensory Rehabilitation.
- Q.21 Write the benefits of Myoelectric Hand .
- Q.22 Explain Visual Auditory Substitution.

**SECTION-D**

**Note:** Long answer type questions. Attempt any two questions out of three questions. (2x8=16)

- Q.23 Explain Motion and its type .
- Q.24 Explain the Management of Orthotics and prosthetics Waste.
- Q.25 Explain FES system in Brief.

**5th Sem. / Medical Electronics**

**Subject : Rehabilitation Engineering(R.E.)**

Time : 3 Hrs.

M.M. : 60

**SECTION-A**

**Note:** Multiple choice questions. All questions are compulsory (6x1=6)

- Q.1 Which component of preventive rehabilitation focuses on minimizing physical strain at work.
  - a) Health Education
  - b) Ergonomics
  - c) Early Intervention
  - d) Community Reintegration
- Q.2 What role do ligaments play in the human body's joint system.
  - a) They store energy for muscle contractions.
  - b) They provide joint stability
  - c) They produce synovial fluid.
  - d) They absorb shock and reduce friction.

Q.3 Which function involves the foot providing sensory feedback about body position and movement.

- a) Joint lubrication      b) Weight-bearing
- c) Shock absorption      d) Proprioception

Q.4 Which component is essential for controlling the movement of a powered wheelchair

- a) Anti-tip devices      b) Footrests
- c) Joystick              d) Push rims

Q.5 What feature should be checked daily to ensure the proper operation of a powered wheelchair

- a) Battery level          b) Wheel alignment
- c) Seat color            d) Footrest height

Q.6 What is a common material used in the construction of lower limb prosthetics, known for being lightweight.

- a) Concrete              b) Polyethylene
- c) Carbon fiber        d) Steel

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## SECTION-B

**Note:** Objective/ Completion type questions. All questions are compulsory. (6x1=6)

Q.7 What is Rehabilitation .

Q.8 What is Motion.

Q.9 What is connective Tissues .

Q.10 Expand CAD.

Q.11 What is prosthetic knee.

Q.12 What is Diagnosis of Disability.

## SECTION-C

**Note:** Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

Q.13 Explain the potential benefits of Rehabilitation

Q.14 Write the application of parallel force system.

Q.15 Explain the Biomechanics of the Ankle.

Q.16 Explain the Cochlear Implants.

Q.17 Explain the user interface of powered wheelchair.

Q.18 Write the benefits of prosthetics and Orthotics.

Q.19 Write some common examples of Vision Substitution.

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