

**BACHELOR IN PROSTHETICS AND ORTHOTICS**  
**THIRD YEAR**

**PAPER IV – PROSTHETICS SCIENCE - III**

*Q.P. Code: 802434*

**Time: Three Hours**

**Maximum : 100 Marks**

**Answer All questions**

**I. Elaborate on:** **(3 x 10 = 30)**

1. Trans humeral prosthesis parts and briefly explains about functions of each part.
2. Explain about Prosthetics elbow joints and functions of each joint.
3. Functional shoulder disarticulation prosthesis and types of shoulder joints.

**II. Write notes on:** **(8 x 5 = 40)**

1. What is heavy duty Trans radial harness system?
2. Explain about friction wrist units.
3. What is outside-locking hinges and inside –locking elbow units?
4. Explain about general concept of myoelectric prosthesis.
5. What is the Difference between hand and hook?
6. Check out procedure of Trans humeral prosthesis.
7. Explain about bio-feedback.
8. Write about Functional prosthesis for partial hand amputation.

**III. Short answers on:** **(10 x 3 = 30)**

1. What is grasp pattern?
2. Write the parts of the trans humeral prosthesis.
3. Describe about activity specific prosthesis.
4. Indication for external elbow unit.
5. What is voluntary opening and closing?
6. Write the Trim lines of Trans humeral socket.
7. Block diagram of myoelectric prosthesis.
8. What is the difference between internal and external elbow unit?
9. What is Nudge control unit?
10. Components of myoelectric prosthesis.

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