# Rajiv Gandhi University of Health Sciences, Karnataka

**Second Year Bachelor in Prosthetics and Orthotics Degree Examination – OCT-2019**

**Time: Three Hours** **Max. Marks: 80 Marks**

## PROSTHETICS SCIENCE - II (RS3)

## Q.P. CODE: 2974

Your answers should be specific to the questions asked
Draw neat, labeled diagrams wherever necessary

**ESSAYS TYPE (Answer any Two)** **2 x 10 = 20 Marks**

1. Define alignment? Explain the Bench & Static alignment of trans femoral prosthesis.
2. Explain the different types of prosthetic knee joints.
3. Explain the checkout process of Knee disarticulation prosthesis.

**SHORT ESSAYS TYPE (Answer any Six)** **6 X 5 = 30 Marks**

4. Explain the suspension systems for knee disarticulation.
5. Describe the comparative biomechanics of quadrilateral & Ischial socket design of transfemoral prosthesis with neat sketch.
6. Explain the measurement and casting procedure of transfemoral prosthesis.
7. Explain the Vaulting & Lateral trunk bending gait deviations.
8. Explain the rectification procedure of transfemoral quadrilateral socket.
9. Explain the biomechanics of knee disarticulation prosthesis with neat sketch.
10. What are the causes of amputation? Write the different level of lower limb amputation with neat sketch?
11. Write the care, maintenance & instructions to be given before discharging the prosthesis.

**SHORT ANSWERS TYPE (Answer any Ten)** **10 x 3 = 30 Marks**

12. Write the location and function of Silesian belt.
13. Define medial & lateral whip.
14. Write the components of exoskeleton transfemoral prosthesis.
15. Write the reason for giving initial flexion of the socket in transfemoral prosthesis.
16. Define single axis foot.
17. Draw Scarpa's triangle with neat diagram.
18. Write the advantage & disadvantages of brim casting.
19. Write about the Voluntary and involuntary knee control.
20. Write the advantages of Total contact socket.
21. Define prosthesis and prosthetics.
22. What is Myodesis and Myoplasty?
23. Explain the self-suspension used for transfemoral prosthesis.

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