

## Rajiv Gandhi University of Health Sciences, Karnataka

First Year Bachelor in Prosthetics and Orthotics Degree Examination – OCT-2019
Time: Three Hours Max. Marks: 80 Marks

Prosthetics - (RS3) Q.P. CODE: 2967

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

- Explain the biomechanics of transtibial socket and prosthesis.
- Write the classification of prosthetic foot. Explain dynamic response foot in brief.
- 3. Describe the measurement and casting process of PTBSC transtibial socket.

## SHORT ESSAYS TYPE (answer any Six)

6 X 5 = 30 Marks

- Describe the medial thrust and its corrective management.
- Explain the rectification process of symes prosthesis with end weight bearing.
- Explain the checkout procedure of transtibial prosthesis.
- 7. Explain the types of low ankle prosthesis for partial foot prosthesis with amputation levels.
- Illustrate and write briefly the anterior-posterior forces acting on symes stump during stance phase.
- Explain the position of knee joints in joint and thigh corset with its indication and contraindications.
- 10. Explain the biomechanics of symes socket.
- Differentiate endoskeletal & exoskeletal prosthesis.

## SHORT ANSWERS TYPE (answer any Ten)

10 x 3 = 30 Marks

- 12. List the different transtibial stump shape. Mention types of scar found in stump.
- Describe articulated prosthetic foot.
- Mention and justify the prosthetic foot for an amputee with quadriceps weakness.
- Mention the socket design with reason for a diabetic transtibial amputee with good collateral ligament stability of the knee joint.
- What is a temporary socket? List the other terminology used for this type of socket.
- List the landmarks for symes prosthesis casting and measurement.
- 18. Mention the indications for PTB SCSP socket.
- 19. Draw a transtibial bench alignment sketch in frontal and sagittal plane.
- Describe the alignment adjustment possible in metallic and polypropylene transtibial components.
- Define prosthetics and prosthesis.
- Mention the importance of amputee assessment.
- 23. List the causes for excessive knee flexion.

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