

[LJ 0816]

AUGUST 2016

Sub. Code :2441

**B.Sc. PROSTHETICS AND ORTHOTICS
FOURTH YEAR
PAPER I – PROSTHETICS SCIENCE – IV**

Q.P. Code: 802441

Time: Three Hours

Maximum : 100 Marks

Answer All questions

I. Elaborate on:

(3 x 10 = 30)

1. Check out procedure for hemi pelvectomy prosthesis.
2. Explain about different type of sports prosthesis and components.
3. Explain about Van Nes rotation plasty and prosthesis design.

II. Write notes on:

(8 x 5 = 40)

1. Explain acceleration and deceleration phase of hemipelvectomy prosthesis.
2. Fixation of hip joint in hemipelvectomy prosthesis.
3. Static alignment of hip disarticulation prosthesis.
4. Write about trans lumbar socket principles.
5. What is the prescription principles of hip disarticulation prosthesis?
6. Prosthetic Management of Bilateral Amputees.
7. Control of mediolateral stump movement in hemi pelvectomy prosthesis.
8. Write about immediate post surgical fitting prosthesis.

III. Short answers on:

(10 x 3 = 30)

1. Define hemipelvectomy.
2. Socket design for trans-lumbar prosthesis.
3. Define immediate Postoperative Prosthesis Fitting (IPPE).
4. What is anthropometric measurement?
5. Van Nes rotation plasty surgery indications.
6. What is phocomelia?
7. Trim line of hemipelvectomy socket.
8. Different types of athletic feet.
9. Explain about initial training for stubbies.
10. Features of foot used for high level amputees.

[LL 0817]

AUGUST 2017

Sub. Code :2441

**B.Sc. PROSTHETICS AND ORTHOTICS
FOURTH YEAR
PAPER I – PROSTHETICS SCIENCE – IV**

Q.P. Code: 802441

Time: Three Hours

Maximum : 100 Marks

Answer All questions

I. Elaborate on:

(3 x 10 = 30)

1. Bio mechanics of hip disarticulation prosthesis.
2. Explain about hemipelvectomy prosthesis and different socket system.
3. Briefly explain about trans lumbar prosthesis sitting and standing.

II. Write notes on:

(8 x 5 = 40)

1. Write about immediate post surgical fitting prosthesis.
2. Control of undesirable perineal pressure in hemi pelvectomy prosthesis.
3. Stubbies prosthesis.
4. Bench alignment of Hip disarticulation prosthesis.
5. What is the criteria of choosing prosthetic hip joints?
6. What are the prosthetic considerations of juvenile amputee?
7. Functional sequence of hip disarticulation prosthesis at mid stance.
8. Write about different designs of hip disarticulation prosthesis sockets.

III. Short answers on:

(10 x 3 = 30)

1. Advantage of Canadian hip prosthesis.
2. What is anthropometric measurement?
3. Define any one type of sports prosthesis.
4. Goals of socket design for translumbar amputee.
5. Describe sitting prosthesis.
6. Define bucket socket.
7. Van Nes rotation plasty surgery indications.
8. Define immediate Postoperative Prosthesis Fitting (IPPE).
9. What is Amelia?
10. Features of foot used for high level amputees.

[LN 0818]

AUGUST 2018

Sub. Code: 2441

**BACHELOR IN PROSTHETICS AND ORTHOTICS
FOURTH YEAR
PAPER I – PROSTHETICS SCIENCE – IV**

Q.P. Code: 802441

Time: Three Hours

Maximum : 100 Marks

Answer All questions

I. Elaborate on:

(3 x 10 = 30)

1. Biomechanics of hip disarticulation prosthesis.
2. Bench alignment of Hip disarticulation prosthesis.
3. Prosthetic Prescription for Trans Lumbar amputation.

II. Write notes on:

(8 x 5 = 40)

1. Explain about bucket socket.
2. Check out procedure for hemipelvectomy prosthesis.
3. Explain about Bilateral Stubbies.
4. Types of Prosthetic Hip Joints.
5. Prosthetic Knee joints used for Hip Disarticulation Prosthesis.
6. Explain about Congenital anomalies.
7. Different types of athletic feet.
8. Bilateral Trans Femoral Prosthesis Bench Alignment.

III. Short answers on:

(10 x 3 = 30)

1. Hip Disarticulation Casting Technique.
2. Trim line of hemipelvectomy socket.
3. What is Amelia?
4. Advantage of Canadian prosthesis.
5. Types of Prosthetic Hip Joints.
6. What is phocomelia?
7. Define any one type of sports prosthesis.
8. Van Nes rotation plasty surgery indications.
9. Immediate post-surgical fitting prosthesis.
10. Prosthesis for Child Amputee.

[LO 0219]

FEBRUARY 2019

Sub. Code: 2441

BACHELOR IN PROSTHETICS AND ORTHOTICS

FOURTH YEAR

PAPER I – PROSTHETICS SCIENCE – IV

Q.P. Code: 802441

Time: Three Hours

Maximum : 100 Marks

Answer All questions

I. Elaborate on:

(3 x 10 = 30)

1. Biomechanics of Hip Disarticulation Prosthesis.
2. Check-Out Procedures for Bilateral Stubbies.
3. Hip Disarticulation Prosthesis Bench Alignment.

II. Write notes on:

(8 x 5 = 40)

1. Trans Lumbar Prosthesis Measurement Procedure.
2. Hip Disarticulation Prosthesis Gait Deviations.
3. Prescription Principles for through hip Prosthesis.
4. Types of prosthetic hip joint.
5. Components used for hip disarticulation prosthesis.
6. Prosthetic prescription for Congenital anomalies.
7. Hip Disarticulation socket fabrication.
8. Bilateral Trans Femoral Prosthesis static Alignment Procedure.

III. Short answers on:

(10 x 3 = 30)

1. Types of Prosthetic Knee Joint.
2. Components used for sports prosthesis.
3. Hip Disarticulation prosthesis measurement.
4. Hip Disarticulation prosthesis Socket Trimline.
5. Suspension System for Hip Disarticulation Prosthesis.
6. Check-out list for hip Disarticulation Prosthesis.
7. Types of Prosthetic feet.
8. Trans Lumbar Amputation.
9. Prosthetic hip joint placement.
10. Suspension System for Bilateral Stubbies prosthesis.

[LP 0819]

AUGUST 2019

Sub. Code: 2441

BACHELOR IN PROSTHETICS AND ORTHOTICS

FOURTH YEAR

PAPER I – PROSTHETICS SCIENCE – IV

Q.P. Code: 802441

Time: Three Hours

Maximum : 100 Marks

Answer All questions

I. Elaborate on:

(3 x 10 = 30)

1. Check-Out for Hip Disarticulation Prosthesis.
2. Prosthetic Knee Joint used for Child Prosthesis.
3. Tilt table prosthesis.

II. Write notes on:

(8 x 5 = 40)

1. Material Used for Hip Disarticulation Prosthesis.
2. Hip Disarticulation Prosthesis Static alignment.
3. Suspension System for Hip Disarticulation prosthesis.
4. Components used for Stubbies prosthesis.
5. Socket Trim line for Hip Disarticulation Prosthesis.
6. Prosthetic hip joint placement for Hip Disarticulation Prosthesis.
7. Static Alignment for Bilateral Stubbies.
8. Trans Lumbar Bucket Socket.

III. Short answers on:

(10 x 3 = 30)

1. Bench alignment for Hip Disarticulation.
2. Types of Hip Disarticulation Socket.
3. Check-Out for Child Prosthesis.
4. List out Prosthetic Gait for Hip Disarticulation.
5. Types of congenital limb anomalies.
6. Types of Prosthetic Knee joint.
7. Hip Disarticulation Socket Tramline.
8. Types of Prosthetic hip joint.
9. Components used for Sports Prosthesis.
10. Hip Disarticulation Prosthesis Measurement.

[LR 2441]

DECEMBER 2020
(AUGUST 2020 EXAM SESSION)

Sub. Code: 2441

BACHELOR IN PROSTHETICS AND ORTHOTICS

FOURTH YEAR – (Regulation 2012 – 13)

PAPER I – PROSTHETICS SCIENCE – IV

Q.P. Code: 802441

Time: Three Hours

Maximum:100 Marks

Answer All questions

I. Elaborate on:

(3 x 10 = 30)

1. Explain the Gait with Hip Disarticulation Prosthesis.
2. A child aged 4 years was diagnosed with Proximal Femoral Focal Deficiency what will be the prosthetic management, justify by its components.
3. Socket Biomechanics and Alignment of Stubbies prosthesis?

II. Write notes on:

(8 x 5 = 40)

1. Hip disarticulation Socket Biomechanics.
2. Immediate post Surgical Prosthesis.
3. Sports prosthesis for Swimming.
4. Casting technique for Hip Disarticulation Amputee.
5. Various knee joints for Running.
6. Prosthetic considerations for Child Amputee.
7. Tilt Table Prosthesis.
8. Factors to be considered for appropriate Prosthesis.

III. Short answers on:

(10 x 3 = 30)

1. Phantom Pain.
2. Bench alignment for Hip Disarticulation Prosthesis.
3. Placement of hip joint in Hip Disarticulation prosthesis.
4. Placement of Rocker bottom in Stubbies.
5. Types of Scar.
6. Trans lumbar Socket Design.
7. Van nes rotation Plasty.
8. Define Longitudinal Deficiency.
9. Socket forces in midstance in Hip Disarticulation Prosthesis.
10. Objective assessment for Bilateral Shoulder Disarticulation.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 0122]

JANUARY 2022

Sub. Code: 2441

(FEBRUARY 2021 & AUGUST 2021 EXAM SESSION)

BACHELOR IN PROSTHETICS AND ORTHOTICS

FOURTH YEAR

PAPER I – PROSTHETICS SCIENCE – IV

Q.P. Code: 802441

Time: Three Hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. What is Van Nes rotation plasty? Explain its prosthetic management.
2. Explain the various types of hip joint for hip disarticulation prosthesis.
3. What are the various stages of prosthetic fitting for bilateral trans femoral amputee.

II. Write notes on:

(8 x 5 = 40)

1. Sports adaptations for snow skiing.
2. Bench alignment for stubbies.
3. Prosthetic foot for running.
4. Suspension system for stubbies.
5. Socket consideration for trans lumbar socket.
6. Types of transfemoral socket.
7. Prosthetic consideration for bilateral shoulder disarticulation.
8. Check out procedure for hip disarticulation prosthesis.

III. Short answers on:

(10 x 3 = 30)

1. Suspension system for trans lumbar prosthesis.
2. Tilt table prosthesis.
3. Define sports prosthesis.
4. Consideration for snow skiing prosthesis.
5. Socket forces during initial contact in hip disarticulation prosthesis.
6. Phantom limb sensation.
7. Objective assessment for appropriate prosthesis.
8. Proximal femoral focal deficiency.
9. Types of through hip prosthesis.
10. Short notes on different activity level.
