

[LH 0815]

AUGUST 2015

Sub. Code: 2433

**BACHELOR IN PROSTHETICS & ORTHOTICS (BPO)
THIRD YEAR
PAPER III – MOBILITY AND REHABILITATION AIDS**

Q.P. Code: 802433

Time: Three hours

Maximum : 100 Marks

Answer all Questions

I. Elaborate on:

(3 x 10 = 30)

1. With Illustration explain about the need of special chair for cerebral palsy.
2. Draw and explain the parts of manual standard wheelchair.
3. Explain about the different types of walking frame.

II. Write notes on:

(8 x 5 = 40)

1. Explain about the measurement and fabrication of box seat.
2. Discuss about the computer based assistive technology for developmental delays.
3. Discuss about the prescription criteria for molded seat.
4. Explain about the various types of seating cushions available for wheelchair user?
5. Explain the method of transfer techniques of wheelchair user.
6. Discuss about the assessment and measurement of wheelchair user.
7. Discuss about the gait training procedure for auxiliary crutch user.
8. Discuss about the assistive devices for spinal cord injury patients

III. Short answers on:

(10 x 3 = 30)

1. What is the function of head support in molded seat?
2. What are the importances of sitting upright?
3. What is the purpose of wheelchair cushion?
4. What is a transfer board?
5. Difference between developmental and educational toys.
6. What is prone board?
7. What is potty chair?
8. What is the use of low-level cart?
9. What is the benefit of modified two wheeler?
10. What is gutter walker?

B.Sc. PROSTHETICS AND ORTHOTICS
(New Syllabus 2013-2014)

THIRD YEAR

PAPER III – MOBILITY AND REHABILITATION AIDS

Q.P. Code: 802453

Time: Three Hours

Maximum : 100 Marks

Answer All questions

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

1. Write in detail about walking aids.
2. Draw and describe about wheel chair.
3. Compare the manual wheel chair with powered wheel chair.

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

1. What is the features and benefits of sitting upright in a wheel chair?
2. Explain seat cushions and pressure relief techniques.
3. Measurement and fabrication of box seat.
4. Method of transfer technique in a wheel chair.
5. Write about crutches.
6. Safety features in a wheel chair.
7. Drive control mechanisms in a powered wheel chair.
8. Gait pattern of auxiliary crutches.

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

1. Explain about tricycles.
2. What is cane gait and walker gait?
3. Write about Head rest.
4. What is gutter walker?
5. Write about molded seats.
6. Write about some assistive devices for SCI patients.
7. Motorized tricycles.
8. Delayed milestone.
9. Standing and tilting frame.
10. How you design mobility aid for asymmetrical leg length?

[LK 0217]

FEBRUARY 2017

Sub. Code :2433

B.Sc. PROSTHETICS AND ORTHOTICS

THIRD YEAR

PAPER III – MOBILITY AND REHABILITATION AIDS

Q.P. Code: 802433

Time: Three Hours

Maximum : 100 Marks

Answer All questions

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

1. What is mobility aids? Describe one mobility aid with diagram.
2. Write in detail about manual wheel chair and motorised wheel chair.
3. Explain about different types of walking accessories.

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

1. Auxillary crutches.
2. Four point gait.
3. Pressure relief in seating surfaces.
4. Ideal seating arrangement in a walker.
5. Drive control mechanisms in a powered wheel chair.
6. Fabrication of box seat.
7. Safety features in a wheel chair.
8. Tricycles.

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

1. Walker gait.
2. Crutch tip.
3. Arm rest.
4. Transfer techniques.
5. Standing and tilting frame.
6. Seat cushions.
7. Positioning of forearm pad in elbow crutches.
8. Foot rests in wheel chair.
9. Asymmetrical leg length.
10. Swing through gait.

[LL 0817]

AUGUST 2017

Sub. Code :2433

BACHELOR IN PROSTHETICS & ORTHOTICS
THIRD YEAR
PAPER III – MOBILITY & REHABILITATION AIDS

Q.P. Code: 802433

Time: Three Hours

Maximum : 100 Marks

Answer All questions

I. Elaborate on:

(3 x 10 = 30)

1. Special chair with tray with neat sketch.
2. Explain on various types of Wheelchair.
3. Gait training using Auxiliary Crutch and Elbow Crutch.

II. Write notes on:

(8 x 5 = 40)

1. Different types of walking frame.
2. Computer based assistive technology for developmental aids.
3. Prescription criteria for molded seat.
4. Types of seating cushions available for wheelchair user.
5. Transfer techniques of wheelchair user.
6. Tricycle.
7. Installation of parallel bars with neat sketch.
8. Assistive devices for spinal cord injury patients.

III. Short answers on:

(10 x 3 = 30)

1. Walking Stick.
2. Parapodium.
3. Developmental and Educational toys.
4. Low Level Cart.
5. Strapping in Molded Seat.
6. Importance of sitting upright.
7. Wheelchair Mobility Skills.
8. Transportation of motorized wheelchair.
9. Use of Parallel Bars.
10. Writing Aids.

BACHELOR IN PROSTHETICS & ORTHOTICS
THIRD YEAR
PAPER III – MOBILITY & REHABILITATION AIDS

Q.P. Code: 802433

Time: Three hours

Maximum : 100 Marks

Answer All questions

I. Elaborate on:

(3 x 10 = 30)

1. Different types of walking aids with sketch.
2. Types of cushions used in wheelchair.
3. Assistive devices for SCI and Stroke Patients.

II. Write notes on:

(8 x 5 = 40)

1. Developmental aids.
2. Fabrication of box seat.
3. Materials used for molded seat.
4. Assessment and measurement of wheelchair user.
5. Pressure relief techniques of wheelchair user.
6. Care and maintenance of wheelchair at home.
7. Components of motorized wheelchair.
8. Gait Training procedure for auxiliary crutch user.

III. Short answers on:

(10 x 3 = 30)

1. Reciprocating walker.
2. Delayed milestones.
3. Prone board.
4. Molded seat.
5. Posture.
6. Appropriate wheelchair.
7. Caster wheels.
8. Anti-tipper and push rim.
9. Modified Two-Wheeler.
10. Adjustments in parallel bars.

[LN 0818]

AUGUST 2018

Sub. Code: 2433

BACHELOR IN PROSTHETICS & ORTHOTICS

THIRD YEAR

PAPER III – MOBILITY & REHABILITATION AIDS

Q.P. Code: 802433

Time: Three Hours

Maximum : 100 Marks

Answer All questions

I. Elaborate on:

(3 x 10 = 30)

1. Molded seat.
2. Motorized wheelchair and its components with neat sketch.
3. Installation and fabrication of parallel bars with neat sketch.

II. Write notes on:

(8 x 5 = 40)

1. Different types of crutches.
2. Standing frame.
3. Benefits of a wheelchair for persons with disability.
4. Wheelchair mobility skills.
5. Fabrication technique of foam pressure relief cushion.
6. Modified two-wheeler for mobility.
7. Measurement and Gait training procedure for elbow crutch user in paraplegia.
8. Assistive devices for stroke patients.

III. Short answers on:

(10 x 3 = 30)

1. Caster wheels
2. Gutter Walker.
3. Normal Milestone.
4. Special Chair.
5. Wheelchair cushion.
6. Transfer Board.
7. Need for wheelchair modification.
8. Tricycle.
9. Gait Training of walker.
10. Eating and Drinking Aids.

[LP 0819]

AUGUST 2019

Sub. Code: 2433

BACHELOR IN PROSTHETICS & ORTHOTICS

THIRD YEAR

PAPER III – MOBILITY & REHABILITATION AIDS

Q.P. Code: 802433

Time: Three Hours

Maximum : 100 Marks

Answer All questions

I. Elaborate on:

(3 x 10 = 30)

1. Types of walker and their attachments.
2. Biomechanics of various kinds of developmental aids.
3. Various developmental and education toys.

Write notes on:

(8 x 5 = 40)

1. Mobility and walking aids.
2. Assistive Technology.
3. Tricycle.
4. Benefits of appropriate wheelchair to wheelchair user.
5. Pressure relief techniques for wheelchair user.
6. Motorized wheelchair.
7. Gait Training of Auxiliary Crutch and Elbow Crutch.
8. Self-help devices.

III. Short answers on:

(10 x 3 = 30)

1. Quad Cane.
2. Para podium.
3. Low level cart.
4. Tilt and Recline in wheelchair.
5. Difference between pneumatic tire and solid tire in wheelchair.
6. Sports Wheelchair.
7. Foam Cushion.
8. Commode Chair.
9. Transportation of Wheelchair.
10. Button Fastener.
