

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

[AHS 0122]

JANUARY 2022
(FEBRUARY 2021 & AUGUST 2021 EXAM SESSION)

Sub. Code: 2482

BACHELOR IN PROSTHETICS AND ORTHOTICS
FOURTH YEAR
PAPER II – ORTHOTIC SCIENCE – IV
Q.P. Code: 802482

Time: Three Hours

Answer ALL Questions

Maximum: 100 Marks

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

1. Milwaukee brace.
2. Biomechanics of Boston brace.
3. Orthotic management of kyphosis.

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

1. Knight Taylors brace.
2. Lumbosacral extension control orthosis.
3. Halo brace.
4. Cowhorn orthosis.
5. Biomechanics of corset.
6. SOMI brace.
7. Four poster orthosis.
8. Hard collar.

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

1. Importance of traction in spinal orthotics.
2. Soft collar.
3. Philadelphia collar.
4. Scoliosis.
5. Lordosis.
6. Parapodium.
7. Motions of spine.
8. Advantages and disadvantage of silicone prosthesis.
9. Corrective force for double curve in scoliosis.
10. Jewett brace.

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

[AHS 0922]

SEPTEMBER 2022

Sub. Code: 2482

(FEBRUARY 2022 & AUGUST 2022 EXAM SESSIONS)

BACHELOR IN PROSTHETICS AND ORTHOTICS

FOURTH YEAR (Regulation from 2017-2018)

PAPER II – ORTHOTIC SCIENCE - IV

Q.P. Code : 802482

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. Cervical traction. Explain about HALO components and functions.
2. Explain about Milwaukee brace with corrective forces.
3. Explain biomechanical principle and function of spinal orthosis.

II. Write notes on:

(8 x 5 = 40)

1. Thoraco-Lumbo-Sacral Spinal Orthosis (TLSO) checkout procedure.
2. Chair back orthosis.
3. Cruciform Anterior Spinal Hyperextension brace.
4. Draw a neat sketch of typical thoracic vertebra and label its parts.
5. Boston brace trim line and its function.
6. How to measure cob's angle?
7. Two poster and four poster spinal orthosis.
8. Intervertebral disc parts and function.

III. Short answers on:

(10 x 3 = 30)

1. Whiplash injury and its orthotic management.
2. C shape and S shape curve of spine.
3. Soft collar and rigid collar.
4. Cheneau brace.
5. Adam's forward bend test.
6. Parapodium.
7. Philadelphia cervical collar.
8. Swivel walker.
9. Differentiate between Lumbo-Sacral corset and belt.
10. Pelvic Traction.

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

[AHS 1123]

NOVEMBER 2023

Sub. Code: 2482

BACHELOR IN PROSTHETICS AND ORTHOTICS
FOURTH YEAR (Regulation 2017-2018 onwards)
PAPER II – ORTHOTIC SCIENCE - IV
Q.P. Code: 802482

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. Explain all types of lumbosacral orthosis.
2. Explain about different types of cervical orthosis.
3. Explain about orthotic management of T8 curvature scoliosis.

II. Write notes on:

(8 x 5 = 40)

1. Explain about Jewett brace.
2. Milwaukee brace - parts and its function.
3. Anatomical primary curve and secondary curve.
4. Function of pelvic girdle.
5. SOMI brace and its function.
6. Orthotic management of Pott's Spine.
7. Write about sagittal and coronal control TLSO.
8. Kyphotic corrective brace.

III. Short answers on:

(10 x 3 = 30)

1. Biomechanics of corset.
2. Differentiate between flexible and rigid spinal orthosis.
3. Types of immobilizer.
4. History of spinal orthosis.
5. The Charleston bending Brace.
6. Types of collar.
7. Prescription criteria of spinal orthosis.
8. Williams brace indication.
9. Chair back orthosis.
10. Philadelphia collar.
