

QP Code: MPO101

MPT in Orthopedics [1st Year]
BF/2024/04
Review of Basic Sciences (MPO-101)

Time: 3 Hours.

Max Marks =80

- Note:** 1.) *Attempt all questions.*
2.) **ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY.**
3.) **NO SUPPLEMENTARY SHEET SHALL BE ALLOWED/ PROVIDED**
4.) **The Student must write O.P. Code in the space provided on the Title page of the Answer Book.**

Section-A

Note: Attempt any one question which carries 20 marks.

Long Essay

1x20=20

1. What is cardiac output? Explain the factors affecting cardiac output. Also enumerate the methods of measurement of cardiac output.

OR

2. Explain structure of a cortical bone in detail. Also explain knee joint in detail with suitable diagrams.

Section-B

Note: All Questions are compulsory. Each question carries 10 marks.

6x10=60

3. Explain in detail about the structure of a skeletal muscle with suitable diagrams.
4. Explain the functional anatomy of respiratory tract in detail.
5. Write in detail about the classification, mechanism of action, and pharmacological actions of steroids.
6. Discuss origin, insertion, action and nerve supply of Hamstring group of muscles with suitable diagrams.
7. Discuss respiratory and cardiovascular response to exercises in detail.
8. Write short note on following :-
- a) Osteoporosis b) Myositis ossificans
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MPT in Orthopedics [1st Year]

BF/2024/04

Review of Basic Therapeutics (MPO 102)**Time: 3 Hours.****Max Marks =80**

- Note:** 1.) *Attempt all questions.*
2.) **ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY.**
3.) **NO SUPPLEMENTARY SHEET SHALL BE ALLOWED/ PROVIDED**
4.) **The Student must write Q.P. Code in the space provided on the Title page of the Answer Book.**

Section-A**Note: Attempt any one question which carries 20 marks.****Long Essay****1x20=20**

1. Describe the methods of Gait Analysis in the field of Physiotherapy under the following headings : [6+7+7= 20]
a. Observational Gait Analysis (Visual Gait Analysis)
b. Common Gait Abnormalities & Best Direction for Observation
c. General Gait Parameters- Temporal & Spatial

OR

2. Describe indications and contraindications for UVR. Explain the procedure to calculate dose of UVR.

Section-B**Note: All Questions are compulsory. Each question carries 10 marks.****6x10=60**

3. Explain Jacobson's Progressive Relaxation Technique & Laura Mitchell's Physiological Relaxation Technique. [10]
4. **Write Short Notes on :** [5+5=10]
(a) ASH Brace in the Patients with Pott's spine
(b) The Principle of Jordan in Orthotics
5. Enumerate the Progressive Resisted Exercises (PRE) and its methods. What is 01 RM, and explain the Knight's DAPRE regimen in details. [10]
6. What is "Dorsal carpal segmental instability"? Explain in detail with a neat diagram. [10]
7. Describe the principle and importance of Vocational Rehabilitation. [10]
8. Differentiate between alternating and direct current. Write in detail the therapeutic uses of both the currents. [10]
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MPT in Orthopedics [1st Year]

BF/2024/04

Advanced Therapautics and Diagnosis (MPO 103)

Time: 3 Hours.

Max Marks =80

- Note:** 1.) *Attempt all questions.*
2.) **ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY.**
3.) **NO SUPPLEMENTARY SHEET SHALL BE ALLOWED/ PROVIDED**
4.) **The Student must write Q.P. Code in the space provided on the Title page of the Answer Book.**

Section-A

Note : Attempt any one question which carries 20 marks.

Long Essay

1x20=20

1. Write in detail about basic concept, principles, grades and uses of Maitland technique.

OR

2. What do you mean by Muscle energy techniques? Explain in detail about basic concept, application and indications of Muscle energy techniques.

Section-B

Note: All Questions are compulsory. Each question carries 10 marks.

Short Essay

6x10=60

3. What is meant by Nerve conduction velocity? Discuss procedure & calculation of MNCV and its uses.
4. **Write short notes on following:** [5+5=10]
(a) F- wave and M- wave
(b) Electrical silence and insertional activity in EMG
5. Write in detail about techniques of Knee joint mobilization with the help of suitable diagrams.
6. Explain in detail about procedure of Tape application in quadriceps strain with help of suitable diagrams.
7. Describe in detail about types, physiological effects and therapeutic uses of LASER therapy.
8. Discuss in detail about evaluation of an adult patient in ICU along with patient monitoring and treatment.
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MPT in Orthopaedics [2nd Year]

BF/2024/04

Physical Therapy in Orthopedic Conditions (MPO 201)

Time: 3 Hours.

Max Marks =80

- Note:** 1.) *Attempt all questions.*
2.) **ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY.**
3.) **NO SUPPLEMENTARY SHEET SHALL BE ALLOWED/ PROVIDED**
4.) **The Student must write Q.P. Code in the space provided on the Title page of the Answer Book.**

Section-A

Note: Attempt any one question which carries 20 marks.

Long Essay

[1x20=20]

1. Discuss Poliomyelitis & its assessment in detail. Discuss various surgical procedures and its PT management in detail?

OR

2. Discuss Scoliosis & its assessment in detail? Discuss its surgical procedures and its PT management in detail?

Section-B

Note: All Questions are compulsory. Each question carries 10 marks.

Short Essay.

[6x10=60]

3. Describe clinical features, pathology and physiotherapy management of Leprosy of hand?
4. Discuss Gait and its variables. Also briefly discuss various Abnormal Gaits?
5. Enumerate the commonest congenital deformities of foot & discuss in detail congenital club foot (CTEV)?
6. Discuss Sprengel shoulder and its PT management in detail?
7. Classify Osteomyelitis and discuss Chronic Osteomyelitis in detail?
8. Classify and discuss Cerebral palsy in detail and write down its PT management in detail?
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MPT in Sports [1st Year]

BF/2024/04

Review of Basic Sciences (MPS101)

Time: 3 Hours.

Max Marks =80

Note: 1.) *Attempt all questions.*

2.) ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY.

3.) NO SUPPLEMENTARY SHEET SHALL BE ALLOWED/ PROVIDED

4.) The Student must write Q.P. Code in the space provided on the Title page of the Answer Book.

Section-A

Note: Attempt any one question which carries 20 marks.

Long Essay

1x20=20

- 2.** Describe briefly clinical significance of surface anatomy of Lungs and draw a diagram showing surface anatomy of lungs.

OR

- 2.** Describe the anatomy of Knee with an elaborate note on the internal derangement of knee.

Section-B

Note: All Questions are compulsory. Each question carries 10 marks.

Short Essay

6x10=60

- 3.** Name various Endocrine glands in the body and enumerate the functions of insulin hormone.
- 4.** Define Endemic, Epidemic and Pandemic infections. Describe causative agents & lab diagnosis giving examples of each.
- 5.** Explain in detail about the pulmonary response to Acute exercise and Chronic exercise.
- 6.** What are various chemical and mechanical events during Contraction and Relaxation.
- 7.** Exercises are important to maintain optimal health and to prevent diseases. Justify.
- 8.** What is Doping. Discuss in detail the doping techniques with emphasis on Steroids and Anabolic steroids.
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