

MPT [1st Year]

BF/2020/10

Computers, Research Methodology & Biostatistics (MP104)

[Common for all Specialties]

Time: 3 Hours.

Max Marks =80

- Note:** 1.) *Attempt all questions.*
2.) **USE SEPARATE ANSWER BOOK FOR EACH PART.**
3.) *The Student must write O.P. Code in the space provided on the Title page of the respective Answer Book.*

UNIT-I

[60 Marks]

QP Code: MPM104 Research Methodology & Biostatistics

- NOTE:** 1. **NON-SCIENTIFIC CALCULATOR IS ALLOWED.**
2. **LOG TABLE MAY BE USED IF REQUIRED.**

Long Essay

1x20=20

Note: Attempt any one question which carries 20 marks.

1. Define Statistics. Discuss its functions, importance and limitations.

OR

2. Explain the meaning and significance of a research design.

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

Short Essay

4x10=40

3. What do you mean by questionnaire? What are the essentials of a good questionnaire?

4. Find mean and standard deviation for the following data:

Class:	0-10	10-20	20-30	30-40	40-50	50-60
Frequency:	5	7	16	18	13	11

5. The mean yield of wheat from a district A was 210 kg with standard deviation 10 kg per acre from a sample of 50 plots. In another district B, the mean yield was 220 kg with standard deviation 12 kg from a sample of 60 plots. Test at 5% level of significance whether there is any significant difference between the mean yield of crops in the two districts. (Table value of Z at 5% level of significance= 1.96).

6. Obtain the rank correlation coefficient between the variables X and Y from the following pair of observed values:

X	68	64	75	50	64	80	75	40	55	64
Y	62	58	68	45	81	60	68	48	50	70

UNIT II

[20 Marks]

QP Code: MPR105

Computer

1. What is Hardware? What is importance of hardware in Computer System. Explain different types of hardwares. [5]
2. What are the uses of MS- Office? Describe various features and functions of MS-Word? [5]
3. How is a Computer and Internet helpful in medical sector? Explain various uses of computer and internet in medical services. [5]
4. How does SPSS work? How is it similar and different from other statistical softwares. [5]
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MPT [2nd Year]

BF/2019/10

Skill Enhancing Studies

(Ethics, Educational Technology & Medico legal aspects) MP-204/MPP-504

[Common for all Specialties]

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.

- I. **Long Essay** 1x20=20
1. Discuss in detail the usage of strategies in teaching a new skill to the students.
- OR**
2. Discuss the need of consumer protection act in physiotherapy health care delivery system in India.

Section-B

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

- II. **Short Essay** 6x10=60
3. Discuss quackery in physiotherapy and how can it be controlled.
4. Differentiate between guidance and counselling.
5. Discuss the technological advancements in the teaching methodologies. Elaborate their advantages and disadvantages too.
6. Discuss the physiotherapy education in India and scope of improvements.
7. Discuss the course curriculum of physiotherapy in India and give suggestions how can it be further improved.
8. Discuss in detail various aspects of formal and informal education.
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MPT in Sports [1st Year]

BF/2020/10

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 SUPPLEMENTRAY 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

1. Describe anatomy of Shoulder joint under following headings: [5x4=20] 1x20=20
- (a) Basic anatomy
 - (b) Scapulohumeral rhythm
 - (c) Static and dynamic stabilizers
 - (d) Rotator interval capsule
 - (e) Glenohumeral ligaments

OR

2. Define the Neuron & Nervous System (Draw a labelled diagram of the Neuron). Elaborate the major functions of Nervous System. Also classify Nervous System with the help of a flow chart. [4x5= 20]

Section-B

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

Short Essay

3. Explain the difference between Osteoarthritis and Rheumatoid Arthritis. 6x10=60
4. What is Doping & Ergogenic Aids (PES) and write a short note on use of diuretics in sports as a Performance Enhancing Substance (PES).
5. Discuss the anatomy of the Thoracic Outlet & its importance.
6. Explain the structure and functions of Skeletal muscle. Write the effects of ageing on skeletal muscles.
7. Write a note on lateral collateral ligaments of the Ankle Joint
8. Write briefly about origin, insertion, nerve supply and action of :
- (a) Infraspinatus muscle [5]
 - (b) Subscapularis muscle [5]

MPT in Sports [1st Year]

BF/2020/10

Review of Basic Therapeutics (MPS102)

Time: 3 Hours.

Max Marks =80

- Note:** 1.) *Attempt all questions.*
2.) **ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY.**
3.) **NO SUPPLEMENTRAY 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. Explain variables of Gait cycle in detail and write a note on various pathological gaits?

OR

2. Discuss biomechanics of phases of Triple jump in detail?

Section-B

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

Short Essay.

6x10=60

3. Write a note on Intermittent pneumatic compression in detail?
4. Discuss principles, merits and demerits of MMT in detail?
5. Write a note on various techniques used in PNF?
6. Write in detail Wheel Chair Modifications in para Olympic sports?
7. Discuss indications and contra- indications of Hydrotherapy and different equipments used in hydrotherapy pool?.
8. Discuss biophysical properties of SWD and write down its physiological and therapeutic effects?
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QP Code: MPS103

MPT in Sports [1st Year]
BF/2020/10

Advanced Therapeutics and Diagnosis (MPS103)

Time: 3 Hours.

Max Marks =80

- Note:** 1.) *Attempt all questions.*
2.) **ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY.**
3.) **NO SUPPLEMENTRAY 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 Osteoporosis under following headings. [5x4= 20]
- (a) Basic definition
 - (b) Risk factors
 - (c) Diagnostic criteria
 - (d) Calcium intake & Osteoporosis
 - (e) Exercise for Osteoporosis

OR

2. Define the SCUBA and explain in detail about the Respiratory problems in deep sea diving.

Section-B

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

Short Essay

6x10=60

3. Explain the Cardiac Output: - Untrained Versus Trained.
4. What is Enhanced Glycogen Storage: - Carbohydrate Loading.
5. Elaborate the Pulmonary structure & function in detail.
6. Explain the structure and functions of Skeletal muscle. Write the effects of workout & aging on skeletal muscles.
7. How Thyroid Hormones affect QoL (Quality of Life) ?
8. **Write briefly about the followings :-** [5x2= 10]
 - (a) Oxygen Debt
 - (b) EPOC (Excess Post Exercise Oxygen Consumption)

QP Code: MPS201

MPT in Sports [2nd Year]

BF/2020/10

Physical Therapy in Sports Conditions (MPS201)

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. Discuss in detail the mechanism of injury and rehabilitation protocol following ACL injury in a Hockey player.

OR

2. Write the principles of training in an athlete participating in long jump with special emphasis to enhance the past performance in the event.

Section-B

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

Short Essay.

6x10=60

3. Write the principles of on field sports injury management and the role of physiotherapist in cricket.
 4. Elaborate the principles and indication for circuit training versus cross training.
 5. Discuss the importance of linear motion and centre of mass in sports biomechanics affecting the performance citing appropriate examples.
 6. Write in detail the musculoskeletal screening for assessing the injury risk.
 7. Discuss the indications, different methods and protocols of Cryotherapy usage in sports.
 8. How will you manage tightness of a hamstring muscle in an athlete?
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MPT in Sports [2nd Year]

BF/2020/10

Athletic Injuries (MPS202)

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. Discuss in detail medical meniscus injury, its physiotherapy protocol and add a note on its differential diagnosis.

OR

2. Define Apophysitis. Enumerate various types of apophysitis and discuss the role of physiotherapy in apophysitis.

Section-B

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

Short Essay.

6x10=60

3. **Write notes on :**
(a) Athlete's Foot [5]
(b) Pelvic Pain in Female athletes [5]
4. Discuss in detail Anterior Compartment Syndrome of leg and add a note on Muscle herniation.
5. **Write notes on :**
(a) Whiplash Injury [5]
(b) Slap Tears [5]
6. Enlist various types of headaches and discuss Migraine in detail.
7. Discuss in detail about exercise in pregnancy and add a note on benefits of Yoga in pregnancy.
8. **Write notes on :**
(a) Scheurmann's Disease [5]
(b) Sinus Tarsi Syndrome [5]
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MPT-Sports 2nd Year

BF/2020/10

Applied Exercise Physiology and Sports Psychology (MPS 203)

Time: 3 Hours.

Max Marks =80

- Note:** 1.) *Attempt all questions.*
2.) **ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY.**
3.) **NO SUPPLEMENTRAY 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.**

Note: Attempt **THREE** questions from each Section A & B.
First Question in both sections is compulsory.

Section-A **(Sports Psychology)**

Marks 40

1. Describe role of sports psychology in enhancing sports performance. [20]
2. Describe various factors affecting growth and development. [10]
3. Describe various methods to control arousal for optional sports performance [10]
4. What are various characteristics of a mentally healthy person. Describe the importance of good mental health in sports. [10]

Section-B **(Applied Exercise Physiology)**

Marks 40

5. What do you mean by I.R.M.? Describe the concept of Progressive Resisted Exercises in detail. [20]
 6. Describe the adaptations to aerobic and anaerobic training in pulmonary system [10]
 7. Describe the mechanism of thermoregulation during exercise. [10]
 8. Describe the role of exercise and diet in weight control? [10]
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QP Code: MPO101

MPT in Orthopedics [1st Year]

BF/2020/10

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 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. What do you mean by Joints? Classify joints with brief description of each with examples and suitable diagrams.

OR

2. Write in details about the origin and course of Ulnar nerve with emphasis on clinical anatomy.

Section-B

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

6x10=60

3. Explain various types of Doping practised in modern sports for enhancing performance.
4. Mechanism of respiration
5. Hansen's disease
6. Adverse effects of steroids
7. Explain the factors responsible for Hemophilia.
8. Explain Lung volume and capacity.
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MPT in Orthopedics [1st Year]

BF/2020/10

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. What is the functional position of Wrist and Hand ? Why is this optimal resting position when there is no specific hand problem ?

OR

2. Discuss indications & contraindications for UVR. Write the procedure for UVR dose calculation in detail.

Section-B

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

6x10=60

3. Explain the principles of Frenkle's exercises with examples.
4. **Write briefly about:**
 a) Force platform [5]
 b) Explain the mechanism of locking and unlocking at Knee Joint. [5]
5. Enumerate various types of orthoses used in Spine. Explain any one spinal orthosis in detail.
6. (a) Write sustained translatory joint-play techniques grades used in Mobilisation.
 (b) Write briefly about Prehension. [5+5= 10]
7. **Write short notes on :**
 a) MMT of Hamstring muscle [3]
 b) Stretching techniques of Deltoid muscle [3]
 (c) Write five free exercises used for Knee strengthening. [4]
8. What is Lewis hunting reaction? Write the different techniques used in Cryotherapy.

MPT in Orthopedics [1st Year]

BF/2020/10

Advanced Therapeutics 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. Discuss manual therapy including history and basic classification. Briefly explain Maitland technique.

OR

2. Describe in detail about PNF, its principles and uses in physiotherapy.

Section-B

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

Short Essay

6x10=60

3. Discuss in detail about EMG including its analysis and apparatus used.
4. **Write short notes on:**
- (a) Concept and applications of Micro currents [5]
(b) Principles of Muscle Energy Technique [5]
5. Discuss in detail about the assessment and management of a patient in ICU.
6. Briefly describe myofascial release and its application technique.
7. Discuss the role of Biofeedback in physiotherapy treatment.
8. Discuss about production of LASER and its types used in therapeutic management.
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MPT in Orthopaedics [2nd Year]

BF/2020/10

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 in detail physiotherapy management of 35 years old man, who has undergone above knee amputation.

OR

2. Write in detail physiotherapy management of a patient who has undergone total knee replacement.

Section-B

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

Short Essay.

[6x10=60]

3. Classify ankle fractures, write P.T. management of Bimalleolar fracture.
 4. Physiotherapy management of Cervical Spondylosis
 5. Physiotherapy management of Foot drop
 6. Strength duration Curve.
 7. Classification of Burns
 8. Principles of Geriatric physiotherapy
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MPT in Orthopaedics [2nd Year]

BF/2020/10

Spinal Disorders and Rehabilitation (MPO 202)

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. How will you diagnose Sacro Iliac Joint Dysfunction (SIJD)? Write the functional anatomy, clinical features and treatment in detail.
- OR**
2. Explain Potts Paraplegia. Write in detail about its pathophysiology, types, differential diagnosis and management.

Section-B

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

Short Essay

[6x10=60]

3. Explain Lumbar Stabilization Programs in detail.
 4. What is Spondylolysis? Explain Rehabilitation for Stress Fracture of the spine?
 5. Elaborate the Vertebral Osteomyelitis and its medical, surgical and physiotherapy management.
 6. Describe the structure and functions of Inter Vertebral Joint (IVJ). Write the effects of exercise & aging on vertebral column.
 7. Write in detail about the Spinal Canal Stenosis and its management.
 8. Different types of Bladder and its management.
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MPT in Orthopaedics [2nd Year]

BF/2020/10

Hand Rehabilitation (MPO 203)

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 Prosthetic hand.

OR

2. Describe various hand fractures and their management.

Section-B

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

Short Essay

[6x10=60]

3. Write in detail about the volar and dorsal interossei in hand with their functions.

4. Explain about de-Quervain's syndrome with management..

5. Explain condition of hand in Hansen's disease.

6. Management of Phantom pain in hand.

7. Various deformities in a Rheumatic hand and their physiotherapy management.

8. Enumerate various Carpal bones and management of scaphoid fracture.

MPT in Neurology [1st Year]

BF/2020/10

Review of Basic Sciences (MPN 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 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 blood supply of Brain with well labelled diagram. Also describe the clinical implications if blood supply to cerebrum is impaired.

OR

2. Discuss the function, physiology and clinical implications of Pyramidal and Extra pyramidal tracts.

Section-B

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

Short Essay.

[6x10=60]

3. Describe briefly about Muscle atrophy and Muscle dystrophy.
4. **Write briefly about :**
(a) Action of glucocorticoids
(b) Anticonvulsants
5. Discuss the process of Cell injury and repair.
6. Classify NSAIDS. Write about the pharmacological actions & uses of NSAIDS with adverse effects.
7. **Write short notes on :**
(a) Ischemic encephalopathy
(b) Meningitis
8. Discuss briefly about the pathophysiology of Multiple sclerosis.
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MPT in Neurology [1st Year]

BF/2020/10

Review of Basic Therapeutics(MPN 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. Explain Scapular patterns of P.N.F.? Discuss in detail about Hold Relax and Rhythmic stabilization ?

OR

2. Explain structure, function and significance of Plantar arches ?

Section-B

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

Short Essay.

[6x10=60]

3. Explain dose calculation procedure for UVR? Discuss briefly about PUVA therapy ?
4. Explain Forward reach test? Discuss briefly about Swiss ball exercises ?
5. **Write short notes on :-** [5x2= 10]
(a) MMT of pectoralis major and triceps
(b) Sustained stretching of latissimus dorsi and sternocleidomostoid
6. **Write short notes on :-**
(a) Cock- up splint [5]
(b) Kinseological EMG [5]
7. Discuss briefly about muscle mechanics of Illeopsoas and Gluteus maximus?
8. Discuss in detail about management of Upper crossed syndrome ?
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MPT in Neurology [1st Year]

BF/2020/10

Advanced Therapeutics and Diagnosis(MPN 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. Discuss briefly about basic concept of Bobath approach? Explain positioning of hemiplegic patient according to bobath approach ?

OR

2. Discuss in detail about basic principle and uses of Biofeedback ?

Section-B

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

Short Essay.

[6x10=60]

3. Discuss briefly about application of Myofascial release in patients with Low back ache ?
4. Discuss briefly about Normal motor unit action potential ? Explain positive sharp wave ?
5. Discuss briefly about therapeutic effects, indications and contraindications of LASER ?
6. Discuss in detail about mobilization of Median Nerve ?
7. Discuss briefly about basic principle and application of Sensory Integration ?
8. Discuss briefly about basic principle of Motor learning programme ?

MPT in Neurology [2nd Year]

BF/2020/10

Physical therapy in Neurological Conditions (MPN 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 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. Discuss briefly about ambulation training of a patient with complete spinal cord injury at C7 Level ?

OR

2. Discuss in detail about physiotherapy management of Multiple Sclerosis?

Section-B

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

Short Essay.

6x10=60

3. Discuss briefly about differential diagnosis, prognosis and physiotherapy management of Duchenne's Muscular Dystrophy?
 4. Discuss briefly about assessment, differential diagnosis and physiotherapy management of Diptheric polyneuropathy?
 5. Discuss briefly about physiotherapy management of Comatose patient?
 6. What is Tone? Explain modified Ashworth's scale ?
 7. Explain differential diagnosis and physiotherapy management of Transverse myelitis?
 8. Discuss briefly about balance impairments in Hemiplegia? Explain its physiotherapy management.
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QP Code: MPN202

MPT in Neurology [2nd Year]

BF/2020/10

Physiotherapy in Neurosurgical Conditions (MPN 202)

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. What are various causes for Abnormal muscle tone? Write about various physical modalities used in management of Spasticity.

OR

2. Discuss about assessment of Motor function in person with Stroke and how it influences treatment strategy.

Section-B

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

Short Essay.

6x10=60

3. Positive signs of Upper motor neuron lesions
 4. Neural mobilization is effective in reducing pain? Justify the sentence.
 5. Different approaches in gait training in Neurologically impaired
 6. Assessment and documentation of Pain
 7. Management of Sensory ataxia
 8. Post operative physical therapy management of Intracranial abscess
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MPT in Neurology [2nd Year]

BF/2020/10

Physical Therapy in Paediatric Neurology Conditions (MPN 203)

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. Explain the criteria for selecting a tool for assessing Motor function in Children.

OR

2. Discuss in detail about the physical therapy and other rehabilitation interventions in a school aged child with Duchenne Muscular dystrophy.

Section-B

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

Short Essay.

6x10=60

3. Components of general autonomic function assessment following Spinal cord injury in Children.

4. Components of physical therapy/ rehabilitation care in a Child with Brain injury in early response stage.

5. Body weight management in Children with Myelodysplasia.

6. Grade II and III for any 3 movements, used in Mallet's classification for upper extremity function in Obstetric brachial plexus injury.

7. Synactive theory of Motor development.

8. Red flag signs in Motor and language development.

QP Code: MPC101

MPT in Cardio Pulmonary [1st Year]

BF/2020/10

Review of Basic Sciences (MPC 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 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 anatomy of Lungs and Pleura. Describe the neural control of breathing.

OR

2. Describe Arterial blood pressure. Describe Hypotension, its causes and management.

Section-B

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

Short Essay.

6x10=60

3. Describe a Cardiac cycle.

4. Describe Lymph and Lymphatic circulation.

5. Describe Mucocilliaray escalator mechanism.

6. Describe Anti-hypertensive drugs.

7. Describe the structure and function of Cerebellum.

8. Describe Inflammation.

QP Code: MPC102

MPT in Cardio Pulmonary [1st Year]

BF/2020/10

Review of Basic Therapeutics (MPC102)

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. Define MMT. Write about grading system used in MMT and recent one used in practice.

OR

2. Explain Posture in Sagittal Plane.

Section-B

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

Short Essay

6x10=60

3. Enumerate in detail causes, evaluation, examination of Impaired Balance.
 4. Write short notes on techniques of Soft Tissue Manipulation.
 5. Write short notes on Frenkel's Exercise.
 6. Explain in detail, about types of UVR and formula to calculate Test Dose.
 7. Describe about types of IRR.
 8. Explain in detail Functional Re-education from lying to sitting.
-

MPT in Cardio Pulmonary [1st Year]

BF/2020/10

Advanced Therapeutics and Diagnosis (MPC 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. Define and discuss in detail the "Bruce Protocol of Exercise testing" mentioning its significance, aims, indications, components, methodology, precautions and contraindications.

OR

2. Discuss in detail different outcome measures and the role of physiotherapist in optimizing the lung function in COPD patients.

Section-B

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

Short Essay

6x10=60

3. Discuss the importance, physiological basis and indications of Pulse oximetry.
 4. Physiotherapy management in a right middle lobe Pneumonectomy.
 5. Elaborate the principles, indications, contraindications and therapeutic effects of using a "Flutter device" in Cardiopulmonary conditions.
 6. Define Weaning and discuss the significance of physiotherapy in the process of weaning.
 7. Distinguish between "aerosol" and "humidification" therapy and elaborate their principles and indications.
 8. Discuss the use of "ABG analysis" and "pulse oxymetry" as an assessment and diagnostic tools?
-

MPT in Cardio Pulmonary [2nd Year]

BF/2020/10

Physical Therapy in Cardio Pulmonary Conditions (MPC 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 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. Describe Lymphedema, its stages, signs & symptoms and PT management in detail.

OR

2. Explain Cardiac rehabilitation of a 60 year old patient of MI.

Section-B

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

Short Essay.

6x10=60

3. What are Pulmonary function tests. Differentiate between Obstructive and Restrictive Lung diseases with respect to PFT.
4. Describe any two Chest wall deformities with their PT management.
5. Discuss causes, sign & symptoms and PT management of a patient with Right Heart Failure.
6. How will you examine Cardio vascular system. Discuss in detail.
7. What is Buerger's disease. Discuss its signs & symptoms and PT management.
8. What is Air Plethysmography. Discuss its significance in the assessment of Chronic venous diseases.
-

MPT in Cardio Pulmonary [2nd Year]

BF/2020/10

Physiotherapy in Cardiopulmonary Surgical Conditions (MPC202)

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 pre-operative assessment and post operative physiotherapy management in Pleurectomy.
- OR**
2. Explain CABG, its indications and pre- operative and post- operative PT management in detail.

Section-B

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

Short Essay

6x10=60

3. Discuss response of Thyroid and Parathyroid hormones to exercise.
4. Describe PT management of a Neonate with Respiratory disease.
5. Discuss current trends in Cardiac Rehabilitation.
6. Explain in detail effects of Ageing in Performance of Heart.
7. What is the termination criteria of exercise for an old patient undergoing Pulmonary rehabilitation. Discuss Aerobic training and Skeletal training for the same.
8. **Write short notes on the following : -**
 - (a) Pectus Carinatum [5]
 - (b) Pectus Excavatum [5]

MPT in Cardio Pulmonary [2nd Year]

BF/2020/10

Physical therapy in Intensive Care Unit Conditions (MPC 203)

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 Arterial blood gas (ABG) analysis and Acid- Base disturbances.
- OR**
2. Describe the role of physiotherapist in the management of a patient with Neuromuscular disease on mechanical ventilator.

Section-B

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

Short Essay

6x10=60

3. Describe Ventilation perfusion ratio.
 4. Describe the Thoracic cage landmarks.
 5. Describe the role of Chest wall palpation in clinical decision making.
 6. Describe various Thoracic cage trauma and its management including role of physiotherapist.
 7. Describe Pulse oximetry.
 8. Describe modes of Mechanical ventilator.
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