MAHATMA GANDHI MISSIONS'S
Institute Of Physiotherapy,
I st Year B.P.TH.
Preliminary Examination Paper (Batch: 18-19)
Section: A & B

Total: 80 Marks **Time: 3Hrs.**

(Draw well labeled diagrams wherever necessary)

Section 'A'

Short answer question (SAQ). (Total=50 Marks)

Q.1) Answer any five out of six. (3 Marks ×5 = 15Marks)

1) Saliva
2) Dead Space
3) Stroke Volume
4) Sodium-Potassium pump
5) Acromegaly
6) Dwarfism

Q.2) Answer any five out of six. (7 Marks ×5 = 35Marks)

1) Factors Affecting Erythropoiesis
2) Juxtaglomerualr Apparatus
3) Menstrual Cycle
4) Spike Potential
5) Oxygen Dissociation Curve
6) Cardio-respiratory changes during moderate exercise

Section 'B'

Long answer question (LAQ). (Total=30 Marks)

Q.3) Question with choice (1×15=15 Marks)
What is excitation- contraction coupling? (04)
Describe walk along theory of muscle contraction (08)
Add a note on rigor mortis (03)

'Or'

Q.4) Describe the properties of skeletal muscle (10) & add a note on structure of sarcomere. (05)

Q.5) Question with choice (1×15=15 Marks)
Describe origin, course, termination & functions of pyramidal tract. (12)
Add a note on Hemiplegia. (03)

'Or'

Q.6) Describe origin, course, termination & functions of dorsal column medial lemniscus system (12).Add a note on sensory ataxia (03).

MGM Institute of Physiotherapy
Prelim Examination 2018-19 MUHS (Anatomy)
Date: - 8/4/19

SECTION A: Short Answer Question (SAQ)

1. Answer any five out of six (3 marks each) 15

   1) Enumerate muscles of mastication with its nerve supply.
   2) Branches of medial cord of brachial plexus.
   3) Enumerate major openings of diaphragm with its contents.
   4) Abduction of shoulder joint.
   5) Posterior relations of kidney.
   6) Enumerate blood supply stomach.

2. Answer any five out of six (7 marks each) 35
   1) Cubital fossa.
   2) Mandibular nerve and otic ganglion
   3) Blood supply of stomach
   4) Supports of uterus.
   5) Interior of right atrium.
   6) Gluteus maximus.

SECTION B: LONG ANSWER QUESTION

3. Describe Knee joint under following 15
   a) Formation and type. 2 b) Ligaments, blood supply and nerve supply 4
   c) Movements with muscles with note on locking and unlocking 6 d)Applied importance. **3**

OR

4. Describe orbit under following heads.
   a)) Enumerate its contents.3 b) Name extraocular muscles with nerve supply 4
   c) Movements of eyeball 4 d) add note on pupillary and accommodation reflex 4

5. Describe Spinal cord under following heads. 15
   a) Length and Extent and lower end of spinal cord.5 b) EnumerateAscending tracts anddescribe spinothalamic tract in detail 5 c)Blood Supply 2 d) Applied importance. 3

OR

6. Describe Facial nerve under following heads.
   a) Nuclei and functional components. 2
   b) Course of nerve 4
   c) Branches of facial nerve4
   d) Add note on chorda Tympani 2
   e) Upper motor neuron and lower motor neuron paralysis of facial nerve. 3

MGM's Institute of Physiotherapy
First Year BPTh Examination
Human Anatomy
Preliminary Examination- April 2018

Duration A+B= 3 Hrs **(A+B= 80 Marks)**

SECTION-A

Q1 Any FIVE out of Six **(3X5=15 Marks)**

a) Enumerate muscles of mastication with its nerve supply.
b) Branches of median cord of brachial plexus.
c) Types of neurons with examples.
d) Classification of muscle with examples.
e) Blood supply of liver.
f) Branches of Femoral nerve.

Q2 Any FIVE out of Six **(7X5=35 Marks)**

a) Enumerate muscles of adductor compartment of thigh with its nerve supply.
b) Supports of uterus
c) Biceps brachi.
d) Boundaries and content of cubital fossa.
e) Mechanism of respiration.
f) Structures passing from supra-orbital fissure.

SECTION-B

Q3 Write any ONE out of TWO **15 Marks**

A) Describe Hip joint under following

a) Formation and type. 2 b) Ligaments, blood supply and nerve supply 4
c) Movements with muscles with note on abduction 6 d)Applied importance.**3**

B) Describe ulnar nerve in forearm under following heads.

a) Formation and Root values. 2 b) Course and relations 4
c) Branches in hand and forearm 6 d) Applied importance 3

Q4 Write any ONE out of TWO **15 Marks**

A) Describe Spinal cord under following heads

a) Extent and lower end of spinal cord. 4
b) Descending tracts. Describe functions of each 5
c) Blood Supply 3
d) Cross section 3

B) Describe Axilla under following heads.

a) Formation. 2 b) Boundaries and contents 4
c) Formation of brachial plexus 6 d) Applied importance 3

(34)

MGM's Institute of physiotherapy

First year BPTh Examination

Anatomy

Terminal Examination- JAN 2018

SECTION A: Short Answer Question (SAQ)

7. Answer any five out of six (3 marks each) 15

7) Enumerate branches of posterior cord of brachial plexus.
8) Enumerate branches of ascending aorta and arch of aorta.
9) Enumerate difference between small and large intestine.
10) Enumerate muscles of arm with their nerve supply.
11) Enumerate arterial supply of stomach.
12) Classification of neurons with its examples.

8. Answer any five out of six (7 marks each) 35

7) Boundaries and contents of cubital fossa.
8) Formation and contents of rectus sheet.
9) Classification of synovial joints with its examples and draw diagram of synovial joint.
10) Flexor retinaculum and its applied importance.
11) Classification of bones and add note on sesamoid and pneumatic bones.
12) Classificaiton of ribs and their respiratory movements.

SECTION B: LONG ANSWER QUESTION

9. Describe Shoulder joint under following 15

f. Formation and type. 2
g. Ligaments and supports 4
h. Movements with muscles. 4
i. Add note on abduction 2
j. Applied importance. 3

OR

10. Describe median nerve in forearm under following heads.

e) Formation and Root values. 2
f) Course in forearm. 3
g) Muscles supplied by it in forearm and hand 6
h) Applied importance. 4

11. Describe Blood supply of heart under following heads. 15

d) Arterial supply 7
e) Venous drainage 3
f) Add note on angiography and angioplasty 5

OR

12. Describe Interior of right atrium following heads.

e) Draw neat label diagram of interior of right atrium. 3
f) Enumerate opening in right atrium 4
g) Add a note on interatrial septum and tricuspid valve. 5
h) Add note on conducting system of heart. 3

MAHATMA GANDHI MISSION'S
MGM's Institute Of Physiotherapy,
I st Year B.P.TH.
Preliminary Examination Paper (Batch: 17-18)
(Draw well labeled diagrams wherever necessary)

Section	Type of Question	Marks
Section A	**Short Answer Question (SAQs)** **1) Answer any Five out of Six (3 Marks)** a) Mitochondrion b) Tidal volume c) Stroke volume d) Sarcomere e) Heart sounds f) Functions of saliva	5 X 3 Marks = 15 Marks
	2) Answer any Five out of Six (7 Marks) a) Origin & spread of cardiac impulse b) Respiratory membrane c) Deglutition d) Juxtaglomerular apparatus e) Dwarfism f) Spermatozoon	5 X 7 Marks = 35 Marks
Section B	**Long Answer Question (LAQs)** **3) Question with choice (1×15=15 Marks)** **a)** What is neuromuscular (N-M) junction? (03) Describe the events taking place at Neuro-muscular junction on arrival of an impulse(09).Add a note on Myasthenia gravis (03) **or** **b)** What is excitation- contraction coupling?(04)Describe walk along theory of muscle contraction (08) Add a note on rigor mortis (03)	1 X 15 Marks = 15 Marks
	4) Question with choice (1×15=15 Marks) **a)** Enumerate the descending tracts of spinal cord. Describe origin, Course, termination & functions of cortico- spinal tract. Add a note on hemiplegia. **Or** **b)** Enumerate the Ascending tracts of spinal cord. Describe the tracts which are carrying the sensation of tactile localization & tactile discrimination.	1 X 15 Marks = 15 Marks
	Total Marks	80 Marks

MGM INSTITUTE OF PHYSIOTHEROPY

I st B.P.TH First Term Ending Theory Examination Paper Jan.19

Subject: Physiology (Batch: 18-19)

(Draw well labeled diagrams wherever necessary)

Section	Type of Question	Marks
Section A	**Short Answer Question (SAQs)** **1) Answer any Five out of Six (3 Marks)** a) Mitochondrion b) Facilitated Diffusion c) Stroke volume d) Residual Volume e) Sarcomere f) Heart sounds **2) Answer any Five out of Six (7 Marks)** a) Sodium-Potassium pump b) Any four properties of nerve c) Plasma proteins d) Factors affecting erythropoiesis e) Vital capacity f) Origin & spread of cardiac impulse	5 X 3 Marks = 15 Marks 5 X 7 Marks = 35 Marks
Section B	**Long Answer Question (LAQs)** **3) Question with choice (1×15=15 Marks)** **a)** What is neuromuscular (N-M) junction? (03) Describe the events taking place at Neuro-muscular junction on arrival of an impulse(09).Add a note on Myasthenia gravis (03) **or** **b)** What is excitation- contraction coupling?(04)Describe walk along theory of muscle contraction (08) Add a note on rigor mortis (03) **4) Question with choice (1×15=15 Marks)** a) Describe the transport of oxygen in the blood. **or** b) What is Cardiac cycle? Describe pressure- volume changes in left ventricle during cardiac cycle.	1 X 15 Marks = 15 Marks 1 X 15 Marks = 15 Marks
	Total Marks	80 Marks

Department of Bichemistry

MGM Medical College ,Aurangabad

First BPTH , Terminal Examination 2018 (MUHS Student)

Total Marks:40

Section – A Short Answer Questions

Q.1 Answer Any Five out of six . (3 Marks each) 3x5= 15

a. Epimers

b. Denaturation

c. Essential amino acids

d. Functions of glycine

e. Disaccharides

f. Glycogen

Q.2 Answer any five out of six (5 Marks each) 5x5 = 25

a. Mucopolysaccharides

b. Factors Affecting Calcium Absorption

c. Functional Classification of proteins

d. functions of Tryptophan

e. Biochemical functions of vitamin A

f. Fate of Tyrosine

MGM Institute of Physiotherapy
First Year B.P.Th
Improvement Examination Oct. 2018
Subject : Biochemistry

(Total Marks 40)

Section A

Q.2 Short Answer Question (Any 5 out of 6) 3X5=15 Marks

1. Mitochondria
2. Mucopolysaccharides
3. Importance of Glycine
4. Factors affecting calcium Absorption
5. Functions of Phospholipids
6. Give two examples of Ketogenic and Glucogenic Amino acids.

Q.3 Short Answer Question (Any 5 out of 6) 5x5=25 Marks

1. Metabolic Acidosis
2. Factors affective enzyme activity
3. B-oxidation of fatty acids
4. HMP Shunt
5. Protein Energy Malnutrition
6. Discuss sources, functions, RDA and deficiency manifestation of Vit. D

09.04.18

MGM'S Institute of Physiotherapy

1st BPTh- Preliminary Examination – April 2018

Subject :- Biochemistry

Duration =2 Hours **Marks – 40**

Q. 1. Short Answer Questions (Any 5) 5 X 3= 15

a. Functional classification of Proteins.

b. Factors affecting enzyme activity.

c. Role of cyclic AMP in hormone action.

d. Give definition of BMR, SDA.

e. Clearance test.

f. Importance of cholesterol.

g. t-RNA

Q.2. Answer any five 5 X 5 = 25

a. Hormonal regulation of blood sugar.

b. Deamination and transamination reaction.

c. Give sources, function and deficiency manifestations of vit D.

d. Liver function test.

e. Explain mechanism and biochemical events of muscle contraction.

F . Write sources, functions and deficiency manifestations of ca^{++}

MGM's Institute of Physiotherapy

First Year BPTh Examination

Fundamentals of Kinesiology & Kinesiotherapy

Terminal Examination- January 2019

Duration A+B= 3 Hrs **(A+B= 80 Marks)**

SECTION-A

Q1 Any FIVE out of Six **(3X5=15 Marks)**

a) Write the difference between Active & Passive insufficiency.
b) Effects and uses of free exercises.
c) Write a note on Agonist with example.
d) State the components of health related physical fitness.
e) Define Pendulum.
f) Principles of Relaxation

Q2 Any FIVE out of Six **(7X5=35 Marks)**

a) Write and discuss about the different types of muscle work with example.
b) Write in detail about the temperature measurement.
c) Write a note on sensory examination in detail.
d) Describe physiological response of Aerobic exercises on cardiovascular and respiratory systems.
e) Define Axes and plane. Write axes and plane of: Hip abduction, shoulder rotation, cervical flexion.
f) Define 1RM and write a note on progressive resistence exercise with emphasis on delorme and Watkins technique.

SECTION-B

Q3 Write any one out of two **(15x2=30 Marks)**

a) Define Lever. (2)
b) What are the types of lever. (3)
c) Write in detail about all types with one example in human body. (10)

OR

a) Define hydrotherapy (2)
b) What is Buoyancy (3)
c) Write in detail about immersion and non – immersion techniques of hydrotherapy. (8)

Q4 Write any one out of two **(15x2=30 Marks)**

a) Define Relaxation (3)
b) Effects and uses of Relaxation. (5)
c) Write in detail about Jacobson's technique. (7)

OR

a) Classify movements (5)
b) Explain the principles of giving relaxed passive movements in detail. (10)

MGM's Institute of Physiotherapy

First Year BPT Examination

KS And KT

Terminal Examination- January 2018

Duration A+B= 3 Hrs **(A+B= 80 Marks)**

SECTION-A

Q1 Any FIVE out of Six **(3X5=15 Marks)**

a) Describe an effect and uses of resistive exercises.
b) Movement arm.
c) Write a note on Angle of pull.
d) Benefits of Vajrasna.
e) Contraindication of Naukasna.
f) Enlist the fulcrum,stable arm and movement arm for the measurement of elbow joint range.

Q2 Any FIVE out of Six **(7X5=35 Marks)**

a) Discuss the technique /procedure to be done for 23yr old physiotherapy student with stiff joints.
b) Explain Active and passive insuffiency with example.
c) Explain Axis and plane in detail.
d) Write down difference between open chain and close chain exercises with example.
e) Explain tadasna in detail using appropriate diagram of each stage with benefits and contraindication.
f) Write in details Halasna using appropriate diagram of each stage with benefits and contraindication.

SECTION-B

Q3 Write Any ONE out of TWO

A) Write in details lever system of human body with example.

OR

B) Define passive movements and describe the principles of passive movements in detail.

Q4 Write Any ONE out of TWO **(15 Marks)**

A. Define Goniometery,its types,indication,contraindication,Principles of Goniometery and write down in detail shoulder joint range assessment(**15 Marks)**

OR

B. Describe under following heading in detail

a) Types of muscle contraction **(5 Marks)**

b) Range of muscle work **(5 Marks)**

c) Muscle action with example. **(5 Marks)**

~~05-10-2018~~

MGM INSTITUTE OF PHYSIOTHERAPY, AURANGABAD
First Year B.P.Th. Examination
Fundamentals of KS & KT
Improvement Examination- October 2018

Duration A+B= 3 Hours **(A+B= 80 Marks)**

08.10.2018.

SECTION-A

Q1. Any **FIVE** out of Six **(3X5=15 Marks)**

a) Draw a diagram for Vajrasana & write its effects.
b) Write a note on Active insufficiency
c) Principles of Suspension.
d) Write a note on Pendulum.
e) Write the components of Goniometer.
f) Benefits of derived position from sitting.

Q2. Any **FIVE** out of Six **(7X5=35 Marks)**

a) Write down the test to check Combined Cortical Sensation.
b) Describe in detail with neat labeled diagram of Tadasana. Add a note on its effects & precautions.
c) State the indication, contraindication and red flags of goniometer.
d) Describe with neat labeled of Bhujangasana with its effects.
e) Write a brief note on measurement of respiratory rate.
f) Define Force, types of Forces.

SECTION-B

Q3. Write Any **ONE** out of two**(15x2=30 Marks)**

a) Define Massage(3). Write down indications & Contraindications of it(7).Write a note on procedure of Back massage(5).

OR

b) Define Relaxation (3). Write down in detail indications for relaxation (5). Add a note on Jacobson relaxation technique (7)

Q4. a] Define Lever.(3). Types of lever.(7). Explain third order lever in detail with example.(5)

OR

b) Define Goniometry.(3) Give indications, contraindications and uses of goniometer.(7)

Write the procedure for measurement of knee joint movement using goniometer.(5)

06.04.18

MGM'S Institute Of Physiotherapy, Aurangabad

First BPT Preliminary Examination

Subject: Electrotherapy

(April-2018)

Sec-A

Q.1) Write down any 5 out 6(Draw diagrammes wherever necessary) **(3x5=15)**

- Write down Laws Of Reflection.
- Inverse square Law.
- What is I R R? Classify types of I R R.
- Describe properties of Laser.
- What is modulation of currents?
- Write down uses of condenser.

Q.2) Write down any 5 out 6(Draw diagrammes wherever necessary) **(7x5=15)**

- Explain about whirlpool bath and its physiological effects.
- Describe production of UVR in low pressure mercury vapor lamp.
- Describe Resting Membrane Potential.
- What is TENS? Write down its types with suitable diagramme.
- Theories of Electricity.
- A.C and D.C Current.

Sec-B

Q.1) Describe Physiological effects and uses of Cryotherapy. Write down techniques of application and contra indication of the same? **(6+5+4)**

OR

Describe the various methods of heat transfer. Describe physiological effects and application of hydro collateral pack on shoulder joint? **(7+8=15)**

Q.2) Describe Thermionic valves Diode and Triode with Diagramme. Write down types of rectifiers and transformers **(8+7=15)**

OR

What is Interferential Therapy. Explain the principle of I .F.T in detail with panel diagramme.

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MGM's Institute of Physiotherapy
First Year BPT Examination
FUNDAMENTAL OF ELECTROTHERAPY
Terminal Examination- January 2018

Duration A+B= 3 Hrs **(A+B= 80 Marks)**

SECTION-A

Q1 Any FIVE out of Six **(3X5=15 Marks)**

a) Define Lenz's and Faraday's law
b) Write a short note on eddy current
c) Write down all the properties of capacitance
d) Define Ohms law
e) Latent heat
f) Write a short note on Electromagnetic Induction

Q2 Any FIVE out of Six **(7X5=35 Marks)**

a) Write in detail about shock and its prevention.
b) Write Molecular theory of Magnetism and explain properties of Magnet.
c) Construction of transformer and diagrammatic representation of grid system.
d) Physical effect of heat.
e) Explain function of switch and Valves with Diagram
f) Define Rectifiers and Transformers and explain the types of transformers.

SECTION-B

Q3 Write Any ONE out of TWO

A) Write in details of Paraffin wax therapy? Write the methods of application? Write the Therapeutic effects, Indication and contraindication? (7+8=15 Marks)

OR

B) 1. Define Sound, Infrasonic and Supersonic sound waves with frequencies.

2. Define Laws of Reflection, Refraction, Absorption, and Attenuation.

3. Explain Inverse square law and Cosine law with diagram. (5+5+5)

Q4 Write Any ONE out of TWO **(15 Marks)**

A) Write in details about Diagnostic Electrical Stimulation?
Write the different types of current with the uses?
Draw neat label panel diagram of Diagnostic Electrical Stimulation?

OR

B) Write down in detail about alternating current and direct current with diagramme.