DHOLE PATIL EDUCATION SOCIETY's
DHOLE PATIL COLLEGE OF PHYSIOTHERAPY
PUNE

I Year B.P.Th (2012)
HUMAN ANATOMY
TERMINAL EXAM

DURATION- Section A+B = 3 hours Date: 30-08-2021 MAX MARKS-80

Instruction:

1. Use blue/black ball point pen only.
2. Do not write anything on the blank portion of the question Paper. If written anything, such type of act will be considered an attempt to resort to unfair means.
3. All questions are compulsory.
4. The number to the right indicates full marks.
5. Draw diagrams wherever necessary.
6. Distribution of syllabus in Question Paper is only meant to cover entire syllabus within the stipulated frame. The question paper pattern is a mere guideline. Questions can be asked from any paper's syllabus into any question paper. Students cannot claim that the Question is out of syllabus. As it is only for the placement's sake, the distribution has been done.
7. Use a common answer book for all Section.

SECTION - A (SAQ) (50 Marks)

1. **Short answer questions (any 5 out of 6)** (5X3=15)

   a) Classify synovial joint with examples 3
   b) Lumbricals nerve supply and action 3
   c) Superior Mediastinum – Boundaries and contents 2 1/2
   d) Enumerate branches of Axillary artery 3
   e) Draw and label Adductor canal
   f) Enumerate contents of Carpal Tunnel 1/2

2. **Short answer questions (any 5 out of 6)** (5X7=35)

   a) Describe Popliteal Fossa 6
   b) Draw and label Transverse section of Pons at level of Facial Colliculus
   c) Describe interior of Right Atrium 6
   d) Describe Intra articular structures of Knee Joint 5

P.T.O

e) Describe Brachial Plexus
f) Describe Fourth ventricle

SECTION — B (30Marks) (LAQ)

3. Long answer question (any 1 out of 2) **(1X15 marks)**

a) Describe Hip Joint under following headings

i. Classification and Bones taking Part
ii. Ligaments and Relations
iii. Muscles and Movements
iv. Arterial Supply
v. Applied Anatomy [2+4+3+3+3]

OR

b) Describe Radial nerve under following headings

i. Origin and Root Value
ii. Course and Distribution
iii. Branches
iv. Applied Anatomy [3+4+4+4]

4. Long answer question (any 1 out of 2) **(1X15 marks)**

a) Describe Corticospinal Tract under following headings

i. Extent and Origin
ii. Course
iii. Functions
iv. Applied Anatomy [3+7+2+3]

OR

b) Describe Circle of Willis and add a note of applied anatomy [15]

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DHOLE PATIL EDUCATION SOCIETY's
DHOLE PATIL COLLEGE OF PHYSIOTHERAPY
PUNE

I Year B.P.Th (2012)
HUMAN PHYSIOLOGY
TERMINAL EXAM

DURATION- Section A+B = 3 hours **Date: 06-09-2021** **MAX MARKS-80**

Instruction:

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7. Use a common answer book for all Section.

SECTION - A (SAQ) (50 Marks)

1. Short answer questions (any 5 out of 6) **(5X3=15 marks)**

a) Functions of plasma proteins.
b) Composition and functions of saliva
c) Primary active transport
d) Non-respiratory functions of lungs
e) Erlanger- Gasser's classification of nerves
f) Write a note on A-V nodal delay

2. Short answer questions (any 5 out of 6) **(5X7=35 marks)**

a) Define homeostasis. Describe the feedback controlling mechanism in detail
b) Enumerate the properties of cardiac muscles, explain any two in detail
c) Compare and contrast fast and slow muscles. Add a note on energetics of muscle contraction
d) Give an account on functions of liver.

P.T.O

e) Draw a neat labelled diagram of action potential in nerve fiber. Discuss in detail the phases of action potential

f) Define & classify anemia. Write in detail about iron deficiency anemia.

SECTION — B (30 Marks)

(LAQ)

3. **2. Long answer question (any 1 out of 2)** **(1X15 marks)**

a) i) Draw a neat labeled diagram of neuromuscular junction.
ii) Describe neuromuscular transmission across it
iii) Add a note on myasthenia gravis. (4+9+2)

OR

b) Classify and describe the various modes of transport across cell membrane in detail. Add a note on facilitated diffusion. (4+7+4)

4. **3. Long answer question (any 1 out of 2)** **(1X15marks)**

a) i) Discuss the mechanics of respiration.
ii) Add a note on functions of surfactant (12+3)

OR

b) i) Draw a neat labeled diagram of Cardiac Cycle.
ii) Describe the events occurring during cardiac cycle.
iii) Give major differences in two main heart sounds (4+8+3)

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DHOLE PATIL EDUCATION SOCIETY's

DHOLE PATIL COLLEGE OF PHYSIOTHERAPY

PUNE

I Year B.P.Th (2012)

BIOCHEMISTRY

TERMINAL EXAM

DURATION- 2 hours | Date: 31-08-2021 | MAX MARKS-40

Instruction:

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3. All questions are compulsory.
4. The number to the right indicates full marks.
5. Draw diagrams wherever necessary.
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7. Use a common answer book for all Section.

Q1. Short answer questions (any 5 out of 6) (5X3=15)

a) Define hormones. Classify them with suitable examples.

b) What are phospholipids? Enumerate their functions.

c) Give sources and daily requirement of vitamin A.

d) Why sucrose is a non-reducing sugar?

e) Describe biochemical functions and deficiency manifestations of vitamin C.

f) Write a short note on iso-electric pH.

Q2. Short answer questions (any 5 out of 6) (5X5=25)

a) Describe digestion and absorption of carbohydrates in detail.

b) Write a note on diagnostic and therapeutic uses of enzymes.

c) Describe urea cycle. Discuss its regulation and disorders.

d) Write a note on key enzymes of glycolysis.

e) Define enzyme inhibition. Discuss different types of enzyme inhibition.

f) Describe metabolic functions of glycine.

DHOLE PATIL EDUCATION SOCIETY's

DHOLE PATIL COLLEGE OF PHYSIOTHERAPY

1st YEAR BPTh

TERMINAL EXAMINATION

FUNDAMENTALS OF KINESIOTHERAPY &KINESIOLOGY

Total Duration: Section A+B = 3 hours Date: 02/09/2021 Total Marks: 80

Instruction:

1. Use blue/black ball point pen only.
2. Do not write anything on the blank portion of the question Paper. If written anything, such type of act will be considered an attempt to resort to unfair means.
3. All questions are compulsory.
4. The number to the right indicates full marks.
5. Draw diagrams wherever necessary.
6. Distribution of syllabus in Question Paper is only meant to cover entire syllabus within the Stipulated frame. The question paper pattern is a mere guideline. Questions can be asked from any paper's syllabus into any question paper. Students cannot claim that the Question is out of syllabus. As it is only for the placement's sake, the distribution has been done.
7. Use a common answer book for all Section.

SECTION A SAQ (50 MARKS)

Q1: Short answer question (only 5 out of 6) **(5X3=15)**

a) Types of equilibrium
b) What are the parts of parallel bar
c) Give one advantage in each of therabands, weights and variable resistance machine
d) Define Centre of gravity and Line of Gravity
e) Shoulder wheel and uses
f) What is pendulum?

Q2: Short answer question (only 5 out of 6) **(5X7=35)**

a) Classification of levers with suitable example with respect to Human body?
b) Explain in detail about Progressive Resistance Training.
c) What is suspension therapy? Explain types of suspension therapy in detail?
d) Write note on types of muscle work?
e) Give the effects and uses of assisted resisted and free exercises?
f) Bhujangasana with uses, benefits and contraindication?

SECTION — B LAQ (30 Marks)

3. Long answer question (any 1 out of 2) **(15 marks)**

1) Define- goniometry and explain types of Goniometer with diagram. Explain principles of application of universal Goniometer for elbow flexion and extension movement. (2+6+7)

[OR]

2) Classify passive movements (4)
Write the principles of passive movements. (5)
Describe passive movements of the Right Shoulder Joint. (6)

4. Long answer question (any 1 out of 2) **(15 marks)**

1) Define yoga. Describe principles of yoga. Enlist yogasanas and explain one supine and one ~~standing~~ Sitting yoga posture? (2+5+8)

OR

2) Define Relaxation and describe general and local techniques of relaxation. Write effects and uses of each. (2+6+7)

Gayatri Vibhute
Roll No 47

DHOLE PATIL EDUCATION SOCIETY's
DHOLE PATIL COLLEGE OF PHYSIOTHERAPY

I Year B.P.Th (2012)
Fundamentals of Electrotherapy
Terminal Exam

DURATION-3Hrs. Date: 01/09/2021 MAX MARKS-80

1. Use blue/black ball point pen only.
2. Do not write anything on the blank portion of the question Paper. If written anything, such type of act will be considered an attempt to resort to unfair means.
3. All questions are compulsory.
4. The number to the right indicates full marks.
5. Draw diagrams wherever necessary.
6. Distribution of syllabus in Question Paper is only meant to cover entire syllabus within the Stipulated frame. The question paper pattern is a mere guideline. Questions can be asked from any paper's syllabus into any question paper. Students cannot claim that the Question is out of syllabus. As it is only for the placement's sake, the distribution has been done.
7. Use a common answer book for all Section.

SECTION - A (SAQ) (50 Marks)

Q1 Short answer questions (any 5 out of 6) (5X3=15)

a) Any 3 Precautions for application of Thermotherapy.

b) Write any 3 differentiating points between Diode and Triode

c) What is a Fuse & enlist it`s 2 uses

d) What are the modes of Transmission of Heat?

e) Amplitude modulation in I.F.T.

f) Any 3 difference between Faradic and Galvanic Current.

Q 2 Short answer questions (any 5 out of 6) (5X7=35)

a) Electrodes used in Low Frequency Currents.

b) Define electric Shock. Write about its types & causes.

c) Describe the types and functions of Transformers.

d) Discuss Duration, Frequency and Waveforms of interrupted galvanic current.

e) Draw panel diagram and write testing of Electric Muscle Stimulator.

f) Discuss various field risk factors on prolong exposure to Electro Magnetic Field.

SECTION — B (LAQ) (30Marks)

Long answer question (any 1 out of 2) (1X15 marks)

Q3. A) Describe the production and testing of Ultra Sound. Draw a neat labelled panel diagram of Ultra Sound. (5+5+5)

[OR]

B) Describe the production and testing of I.F.T. Draw a neat labeled panel diagram of I.F.T. (5+5+5)

Q4. A) Discuss in detail physiological effects and therapeutic effects of heat therapy. Add a note on various methods of application of Paraffin Wax Bath. (4+4+7)

[OR]

B) Define Cryotherapy. Describe therapeutic effects of Cryotherapy. Describe various methods of applications of Cryotherapy. (2+6+7)

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1st YEAR BPTh (2012)
HUMAN – ANATOMY
PRELIM EXAM

DURATION- Section A+B = 3 hours **Date: 14-12-2021** **MAX MARKS-80**

Instruction:

1. Use blue/black ball point pen only.
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3. All questions are compulsory.
4. The number to the right indicates full marks.
5. Draw diagrams wherever necessary.
6. Distribution of syllabus in Question Paper is only meant to cover entire syllabus within the Stipulated frame. The question paper pattern is a mere guideline. Questions can be asked from any paper's syllabus into any question paper. Students cannot claim that the Question is out of syllabus. As it is only for the placement's sake, the distribution has been done.
7. Use a common answer book for all Section.

SECTION – 'A' SAQ (50 MARKS)

1. **Short answer questions (any 5 out of 6)** [5 x 3 = 15 Marks]

   a) Classify bones with examples

   b) Nerve supply and action of Flexor Digitorum Profundus

   c) Enumerate structure forming stomach bed

   d) Enumerate branches of Femoral artery

   e) Draw and label Cubital fossa boundaries and contents canal

   f) Enumerate contents of spermatic cord

2. **Short answer questions (any 5 out of 6)** [5 x 7 = 35 Marks]

   a) Describe Structure covered under Gluteus Maximus

   b) Draw and lable T.S of Medulla at level of Pyramidal decussation

c) Describe First carpometacarpal joint

d) Describe Blood supply of Heart

e) Describe Anterior relations of right and left Kidney

f) Draw and label Sulci and Gyri on cerebral surface

SECTION – 'B' LAQ (30 MARKS)

3. Long answer question (any 1 out of 2) [1 x 15 = 15 Marks]

A) Describe Scalp under following headings

Layers	[4]
Blood supply	[4]
Nerve supply	[3]
Applied Anatomy	[4]

B) Describe Median nerve under following headings

Origin and Root Value	[3]
Course and Distribution	[4]
Branches	[4]
Applied Anatomy	[4]

4. Long answer question (any 1 out of 2) [1 x 15 = 15 Marks]

A) Describe Lateral Longitudinal arch under following headings [15 Mark]

Bones taking part in formation	[3]
Factors supporting arch	[7]
Functions	[2]
Applied Anatomy	[3]

B) Describe Shoulder Joint under following headings [15 Mark]

Bones taking part and classification	[2]
Ligaments	[3]
Relations	[3]
Muscles and movements at Joint	[4]
Applied Anatomy	[3]

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I Year B.P.Th (2012)
HUMAN – PHYSIOLOGY
PRELIMINARY EXAM

DURATION- Section A+B = 3 hours **Date: 16-12-2021** **MAX MARKS-80**

Instruction:

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3. **All questions are compulsory.**
4. **The number to the right indicates full marks.**
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7. **Use a common answer book for all Section.**

SECTION – 'A' SAQ (50 MARKS)

1. Short answer questions (any 5 out of 6) **[5 x 3 = 15 Marks]**

a) ABO Blood group system .
b) Write a note on Saltatory conduction in nerve fibres.
c) Cushing's Syndrome .
d) Ovulatory Phase of menstrual cycle.
e) Presbyopia.
f) Facilitated diffusion.

2. Short answer questions (any 5 out of 6) **[5 x 7 = 35 Marks]**

a) Carbon dioxide transport in body.
b) Cardio-respiratory changes during moderate exercise.
c) Define homeostasis. Describe the feedback control mechanism in detail.
d) What is a Synapse? Describe briefly any two properties of synapse .
e) Renin Angiotensin system .
f) Physiological actions of Thyroid hormone.

SECTION – 'B' LAQ (30 MARKS)

1. Long answer question (any 1 out of 2) [1 x 15 = 15 Marks]

A) i) What are the energy sources used during muscle contraction? 4
ii) Describe the molecular mechanism of muscle contraction. 9
iii) Add a note on Myasthenia gravis. 2

OR

B) i)Define cardiac output . Give its normal value. 2
ii) Give the autonomic control of heart rate 7
iii) Describe the factors affecting stroke volume 6

2. Long answer question (any 1 out of 2) [1 x 15 = 15 Marks]

A) i) Draw a neat labeled diagram of Respiratory centre 4
ii) Discuss the neural regulation of respiration 8
iii) Add a note on 'Ondine's curse ' 3

OR

B) i)Enlist the descending tracts. 4
ii) Describe the origin, course and termination of Pyramidal tract. 6
iii) Differentiate between upper motor neuron and lower motor neuron. 5

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I Year B.P.Th (2012)
BIOCHEMISTRY
PRELIMINARY EXAM

DURATION- Section A+B = 3 hours Date: 15-12-2021 MAX MARKS-50

Instruction:
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7. Use a common answer book for all Section.

1. Short answer questions (any 5 out of 6) [5 x 3 = 15 Marks]

1) Differentiate between water and fat-soluble Vitamins.
2) What are hormones? Name the 2 hormones that regulate the blood glucose level in the body.
3) What are lipids? Write any 4 functions of lipids.
4) Define lipid profile. What are the tests in lipid profile tests?
5) Name any 3 biologically important molecule that are synthesized from Glycine.
6) What are carbohydrates? How they are classified and give one example each.

2. Short answer questions (any 5 out of 6) [5 x 5 = 25 Marks]

1) What is TCA cycle? Draw TCA cycle and explain with energetic.
2) Explain the different factors that affect the enzyme activity.
3) i) Classify hormones on basis of mechanism of action. Give one example each.
   ii) Explain the mechanism of action of cAMP as 2nd messenger.
4) Describe urea cycle with a neat diagram.
5) What are trace elements (minerals)? Name them and its functions.
6) Write about heme catabolism. How bilirubin is excreted from the body? Name the disease caused by the defective heme catabolism.

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1st YEAR BPTh 2021-2022
PRELIMINARY EXAMINATION
FUNDAMENTALS OF KINESIOTHERAPY & KINESIOLOGY

Total Duration: Section A+B = 3 hours **Date: 17/12/21** **Total Marks: 80**

Instruction:

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7. **Use a common answer book for all Section.**

SECTION A SAQ (50 MARKS)

1) Short answer question (only 5 out of 6) **(5X3=15)**

a) State Newton's Third Law of motion with example
b) Open kinematic exercises. / Cardinal plane & axis of movement.
c) Benefits of Axillary crutches
d) Enumerate different positions derived from standing
e) Anulom Vilom
f) Active insufficiency

2) Short answer question (only 5 out of 6) **(5X7=35)**

a) Define pulley. Describe types of pulley. Add a note on anatomical pulley.
b) Describe the effects and uses of warm up and cool down exercises
c) Explain kneeling position & write its muscle work.
d) Types of muscle action. Write a note on angle of pull.
e) Effects and uses of Group Exercises.
f) Explain Extensibility and compressibility with one appropriate example

SECTION — B LAQ (30 Marks)

3. Long answer question (any 1 out of 2) **(15 marks)**

a) Explain the types and principles of active assisted movements. Mention differences between active and passive movements with on example each (1+7+7)

OR

b) Write the principles of suspension therapy. Explain Axial suspension in detail with it's effects and uses.. (4+7+4)

4. Long answer question (any 1 out of 2) **(15 marks)**

a) Write in detail classification of massage manipulations. Describe in detail about the types, effects & uses of kneading maneuver (7+8)

OR

b) Define goniometry . Explain principles of application of universal goniometer for Hip flexion and extension movement . Write any 5 uses of Goiometry. (2+8+5)

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1st YEAR BPTh 2021-2022
PRELIMINARY EXAMINATION
FUNDAMENTALS OF ELECTROTHERAPY

Total Duration: Section A+B = 3 hours **Date:16/12/21** **Total Marks: 80**

Instruction:

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7. **Use a common answer book for all Section.**

SECTION A SAQ (50 MARKS)

1) **Short answer question (only 5 out of 6)** (5X3=15)

a) A.C vs D.C
b) Lewis hunting reaction.
c) Describe modes of heat transfer.
d) Enlist factors which increases skin resistance
e) State Cosine law
f) Enlist home remedies for Cold and Hot

2) **Short answer question (only 5 out of 6)** (5X7=35)

a) Differences between faradic & galvanic currents
b) Describe various methods of application of Cryotherapy.
c) Write in detail the principles of production of IFT
d) What is LASER? Describe its types and properties.
e) Describe Types of Infra Radiation lamps
f) Mechanical effects of ultrasound

SECTION — B LAQ (30 Marks)

3. **Long answer question (any 1 out of 2)** (15 marks)

a) Describe construction and production of SWD. (8+7)
Draw and label a panel diagram of short wave diathermy.

OR

b) Classify currents based on frequency with examples. (4+7+4)
Discuss about various modes of TENS.
Write any 3 indications of TENS.

4. **Long answer question (any 1 out of 2)** (15 marks)

a) Define contrast bath. (2+3+5+5)
Explain principle of contrast bath.
Write its technique of application.
Mentions its indication and contraindication

OR

b) What is whirlpool bath. (2+5+8)
Explain Types of whirlpool Bath.
Discuss its physiological and therapeutic effects.

[Total No. of Pages : 2

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First B.P.T.H. (2012) Examination, (Phase - III) Winter - 2021
HUMAN ANATOMY - I

Total Duration : 3 Hours | Total Marks : 80

Instructions : *1) Use blue/black ball point pen only.*

*2) Do not write anything on the **blank portion of the question paper.** If written anything, such type of act will be considered as an attempt to resort to unfair means.*

*3) **All** questions are **compulsory.***

*4) The number to the **right** indicates **full** marks.*

*5) Draw diagrams **wherever** necessary,*

6) Distribution of syllabus in Question Paper is only meant to cover entire syllabus within the stipulated frame. The Question paper pattern is a mere guideline. Questions can be asked from any paper's syllabus into any question paper. Students cannot claim that the Question is out of syllabus. As it is only for the placement sake, the distribution has been done.

7) Use a common answer book for all sections.

SECTION "A" SAQ (50 Marks)

1. Short answer question (**any five** out of six) : **[5 × 3 = 15]**

a) Draw a well labelled diagram mediastenal surface left lung.

b) Write openings present in Right Atrium.

c) Write blood supply of Liver.

d) Anterior relations left kidney.

e) Rotator cuff shoulder joint.

f) Write applied anatomy of Facial nerve.

2. Short answer question (**any five** out of six) : [5 × 7 = 35]

a) Write short note on functions of hypothalamus.

b) Describe connections of Cerebellum.

c) Nerve supply tongue.

d) Describe in short important sulci and gyri of cerebrum.

e) Enumerate and describe branches of Mandibular nerve.

f) Describe course and termination of Sciatic nerve.

SECTION "B" LAQ (30 Marks)

3. Long answer question (**any one** out of two) : [1 × 15 = 15]

a) Describe elbow joint under

i) Type and articular surfaces

ii) Ligaments

iii) Relations

iv) Blood and Nerve supply

v) Applied anatomy.

b) Describe cerebellum under

i) Morphology

ii) Nuclei

iii) Connections

iv) Functions

v) Applied.

4. Long answer question (**any one** out of two) : [1 × 15 = 15]

a) Describe Hip joint under

i) Type and articular surfaces

ii) Ligaments

iii) Relations

iv) Blood and Nerve supply

v) Applied anatomy.

b) Describe Hypoglossal nerve with applied anatomy in detail.

[Total No. of Pages : 2

63112

First B.P.TH. (2012) Examination, (Phase - III) Winter - 2021
HUMAN PHYSIOLOGY - II

Total Duration : Section A+B = 3 Hours

Total Marks : 80

SECTION - A & SECTION - B

Instructions : 1) *Use blue/black ball point pen only.*

2) *Do not write anything on the **blank portion of the question paper.** If written anything, such type of act will be considered as an attempt to resort to unfair means.*

3) ***All** questions are **compulsory.***

4) *The number to the **right** indicates **full** marks.*

5) *Draw diagrams **wherever** necessary,*

6) *Distribution of syllabus in Question Paper is only meant to cover entire syllabus within the stipulated frame. The Question paper pattern is a mere guideline. Questions can be asked from any paper's syllabus into any question paper. Students cannot claim that the Question is out of syllabus. As it is only for the placement sake, the distribution has been done.*

7) *Use a common answer book for all sections.*

SECTION-"A" SAQ (50 Marks)

1. Short answer question (**any five** out of six) : [5 × 3 = 15]

   a) Sodium-potassium pump.

   b) Strength-Duration curve.

   c) Function of Surfactant.

   d) Heart sounds.

   e) Physiological actions of Oxytocin.

   f) Colour blindness.

2. Short answer question (**any five** out of six) : [5 × 7 = 35]

   a) Spike potential.

   b) Sarcotubular system.

   c) Respiratory membrane.

d) Origin & spread of cardiac impulse.

e) Describe factors affecting Glomerular filtration.

f) Hormonal regulation of menstrual cycle.

SECTION-"B" LAQ (30 Marks)

3. Long answer question (**any one** out of two) : **[1 × 15 = 15]**

a) Enumerate properties of nerve. Describe production & conduction of nerve impulse. **[3 + 12]**

b) Describe the properties of skeletal muscle & add a note on structure of sarcomere. **[12 + 3]**

4. Long answer question (**any one** out of two) : **[1 × 15 = 15]**

a) Describe dorsal column medical leminiscus system with a well labeled diagram. Name the sensations carried by this pathway. **[12 + 3]**

b) Give the structure of synapse. Give detail about synaptic transmission & enumerate its properties. **[5 + 7 + 3]**

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63113

First B.P.TH. (2012) Examination, (Phase - III) Winter - 2021
BIOCHEMISTRY

Total Duration : 2 Hours

Total Marks : 40

Instructions : 1) *Use **blue/black** ball point pen only.*
2) *Do not write anything on the **blank portion of the question paper**. If written anything, such type of act will be considered as an attempt to resort to unfair means.*
3) ***All** questions are **compulsory.***
4) *The number to the **right** indicates **full** marks.*
5) *Draw diagrams **wherever** necessary.*
6) *Distribution of syllabus in Question Paper is only meant to cover entire syllabus within the stipulated frame. The Question paper pattern is a mere guideline. Questions can be asked from any paper's syllabus into any question paper. Students cannot claim that the Question is out of syllabus. As it is only for the placement sake, the distribution has been done.*
7) *Use a common answer book for all sections.*

1. Short answer question (**any five** out of six) : **[5 × 3 = 15]**

a) Biochemical functions of Calcium and Phosphorus
b) Regulation of Heme Synthesis
c) Phenylketonuria
d) What is obesity, write two factors causing obesity.
e) Factors affecting BMR.
f) Nitrogen Balance

2. Short answer question (**any five** out of six) : **[5 × 5 = 25]**

a) Urea cycle & its significance.
b) Discuss factors affecting enzyme action.
c) Sources, RDA, biochemical functions and deficiency manifestation of Vit D.
d) Biochemical changes during starvation.
e) Diabetic profile
f) Classification & biochemical importance of lipids



N - 255

[Total No. of Pages : 2

63114

First B.P.TH. (2012) Examination, (Phase - III) Winter - 2021
FUNDAMENTALS OF KINESIOLOGY AND KINESIOTHERAPY - IV

Total Duration : 3 Hours

Total Marks : 80

Instructions : *1) Use blue/black ball point pen only.*

*2) Do not write anything on the **blank portion of the question paper.** If written anything, such type of act will be considered as an attempt to resort to unfair means.*

*3) **All** questions are **compulsory.***

*4) The number to the **right** indicates **full** marks.*

*5) Draw diagrams **wherever** necessary,*

6) Distribution of syllabus in Question Paper is only meant to cover entire syllabus within the stipulated frame. The Question paper pattern is a mere guideline. Questions can be asked from any paper's syllabus into any question paper. Students cannot claim that the Question is out of syllabus. As it is only for the placement sake, the distribution has been done.

7) Use a common answer book for all sections.

SECTION "A" SAQ (50 Marks)

1. Short answer question (**any five** out of six) : **[5 × 3 = 15]**

a) Angle of pull.

b) Centre of gravity.

c) Effects of Passive movements.

d) Vestibular Ball.

e) Naukasana.

f) Enumerate the different axes and planes.

2. Short answer question (**any five** out of six) : **[5 × 7 = 35]**

a) Define group exercises. Give its effects and uses.

b) Define hydrotherapy. Give the effects and uses of hydrotherapy.

c) Give the effects and uses of relaxation. Describe the contrast method of relaxation.

d) Enumerate the accessories to improve strength in the therapeutic gym. Explain the uses of any three.

e) Define effleurage. Give its effects and uses.

f) Define active movements. Gives its effects and uses.

SECTION "B" LAQ (30 Marks)

3. Long answer question (**any one** out of two) : **[1 × 15 = 15]**

a) Define Goniometry. Give the principles and uses of Goniometry. Describe the different types of goniometers.

b) Define passive movements. Give the principles and uses of passive movements.

4. Long answer question (**any one** out of two) : **[1 × 15 = 15]**

a) Define levers, describe the different types of levers in the human body with one example for each.

b) What are the principles of suspension therapy? What are the different types of suspensions? Describe any one type of suspension with an example.



[Total No. of Pages : 2

63115

First B.P.T.H. (2012) Examination, (Phase - III) Winter - 2021
FUNDAMENTALS OF ELECTRO THERAPY

Total Duration : 3 Hours

Total Marks : 80

Instructions : 1) *Use **blue/black** ball point pen only.*

2) ***Do not** write anything on the **blank portion of the question paper.** If written anything, such type of act will be considered as an attempt to resort to unfair means.*

3) ***All** questions are **compulsory.***

4) *The number to the **right** indicates **full** marks.*

5) *Draw diagrams **wherever** necessary.*

6) *Distribution of syllabus in Question Paper is only meant to cover entire syllabus within the stipulated frame. The Question paper pattern is a mere guideline. Questions can be asked from any paper's syllabus into any question paper. Students cannot claim that the Question is out of syllabus. As it is only for the placement sake, the distribution has been done.*

7) *Use a common answer book for all sections.*

SECTION "A" SAQ (50 Marks)

1. Short answer question (any five out of six) : **[5 × 3 = 15]**

a) Latent heat of fusion.

b) Laws of radiation.

c) Types of TENS.

d) Types of capacitors.

e) Uses of fuse.

f) Beat frequency.

2. Short answer question (any five out of six) : [5 × 7 = 35]

a) Types and functions of transformer.

b) Electrical skin resistance.

c) Different types of Ultra Violet Radiation Lamps.

d) Production of Ultra Sound waves.

e) Explain Electric Shock. Write its causes.

f) What are the different types of LASER. Explain its properties.

SECTION "B" LAQ (30 Marks)

3. Long answer question (any one out of two) : [1 × 15 = 15]

a) Discuss physiological effects of superficial heat. Describe therapeutic uses of Paraffin Wax Bath. Write merits and demerits of Paraffin Wax Bath.

b) Write physiological effects of cold. Describe methods of application of cryotherapy. Write its contraindications.

4. Long answer question (any one out of two) : [1 × 15 = 15]

a) What is principle of interferential therapy (I.F.T.)? Draw panel diagram of I.F.T. Describe different modes of applications of I.F.T.

b) What are the characteristics of Faradic Type and Interrupted Direct currents. Draw panel diagram of a Diagnostic muscle Stimulator. Describe different types of electrodes used in low frequency currents.

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