[Total No. of Pages : 2

63114

First BPTH (2012) Examination, Summer (Phase - II) - 2019
FUNDAMENTALS OF KINESIOLOGY AND KINESIOTHERAPY - IV

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 answerbook for all sections.*

SECTION - A SAQ (50 Marks)

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

a) What is Pendulum?
b) Write the position of tadasana.
c) Define Kinetics and Kinematics.
d) Define Angle of pull.
e) Enumerate 3 types of Resistance bands.
f) Define Range of muscle work along with types.

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

a) Describe Positions derived from lying.
b) Describe Active & Passive Insufficiency.
c) Describe Levers with examples in human body.
d) Describe Physiological effects of Aerobic exercises.
e) Describe effects of General relaxation.
f) Describe Effects and uses of Relaxed passive movements.

SECTION - B LAQ (30 Marks)

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

   a) Describe Indications, contraindications, Physiological Effects of massage.

   b) Define axis & plane with examples of each. Describe the movements of Hip & Shoulder joint in reference to axes & planes.

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

   a) Describe Effects and uses of hydrotherapy along with Physical properties of water.

   b) Define Goniometry. Describe Uses of Goniometryalong with types of goniometer.

▽▽▽▽

[Total No. of Pages : 2

63115

First BPTH (2012) Examination, Summer (Phase - II) - 2019
FUNDAMENTALS OF ELECTROTHERAPY

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) Define Joule's law.
b) Explain the function of Fuse.
c) Write a note on Electromagnetic spectrum.
d) Describe the constuction of Triode valve.
e) Explain Lewis-Hunting reaction.
f) State the factors affecting the resistance of a wire conducting current.

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

a) Explain the methods of reducing skin resistance.
b) Explain the earth shock and state the precautions to be taken to avoid it.
c) Explain Reflection, Refraction and Attenuation of sound waves.
d) Write the construction and types of Rheostat.
e) Explain the construction of Whirlpool bath.
f) Differentiate between luminous and nonluminous type of Infra-red.

SECTION - "B" LAQ (30 Marks)

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

   a) Explain the physiological uses & therapeutic effects of superficial heat. Write the indications and contraindications of paraffin wax bath. [4 + 4 + 4 + 3]

   b) Explain the physiological effects of cryotherapy. Write the various methods of application of it. [7 + 8]

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

   a) Explain the various types of low frequency currents used in physiotherapy with their parameters. Draw the panel diagram of multistimulator.

   b) What is electromagnetic induction? Explain the production of SWD in detail with panel diagram. [3+7+5]

ⓘⓘⓘ

[Total No. of Pages : 1

63113

First BPTH (2012) Examination, Summer (Phase - II) - 2019
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) Describe transmethylation reaction with suitable examples.
   b) Role of vitamin D in maintaining calcium homeostasis.
   c) Explain competitive inhibition with suitable examples.
   d) Write a note on heteropolysaccharides.
   e) Therapeutic uses of enzymes. (any three)
   f) Specific dynamic action.(S.D.A.)

2. Short answer question (**any five** out of six) : **[5 × 5 = 25]**
   a) Define hormones. Explain mechanism of action of steroid hormones.
   b) Explain tricarboxylic acid (TCA) cycle along with it's regulation.
   c) Write sources, RDA, biochemical functions & deficiency manifestations of Vitamin B12.
   d) Name ketone bodies. Describe formation of ketone bodies. Define Ketonemia, ketonuria & ketosis.
   e) Define essential fatty acids. Write their examples, functions and deficiency manifestations.
   f) Give diagrammatic representation of electron transport chain. State the sites of ATP production and their inhibitors.

▽▽▽▽

[Total No. of Pages : 2

63112

First BPTH (2012) Examination, Summer (Phase - II) - 2019
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 answerbook for all sections.

Section - A SAQ (50 Marks)

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

a) Enumerate the properties of cardiac muscle. Explain why cardiac muscle cannot be tetanised.

b) Micturation reflex.

c) Spermatogenesis.

d) Acromegaly.

e) Functions of WBCS.

f) Surfactant.

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

a) What is acclimatization? What are the changes occuring during acclimatization.

b) Enlist various mechanisms for the transport of substances across membrane. Describe one of them.

c) Describe transmission of impulse across a synapse. What is IPSP.

d) Describe the components and functions of basal ganglia. Describe Parkinson's disease.

e) Brown Sequard syndrome.

f) Define resting membrane potential. Explain ionic basis of R.M.P in a nerve fiber.

Section - B LAQ (30 Marks)

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

a) Describe the process of oxygen transport from lungs to tissues.

b) Describe the events and pressure volume changes in cardiac cycle occurring in the ventricles.

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

a) What is excitation-contraction coupling? Explain the role of calcium ions in this process.

b) Describe origin, course, termination and functions of pyramidal tracts.

▽▽▽▽

[Total No. of Pages : 2

63111

First BPTH (2012) Examination, Summer (Phase - II) - 2019
HUMAN ANATOMY - I

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 answerbook for all sections.

Section - A SAQ (50 Marks)

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

a) Peumatic bone.
b) Guy rope muscles.
c) Bare areas of liver.
d) Sternocleidomastoid muscle.
e) Mention joints and muscles involving inversion and eversion of foot.
f) Enumerate Carpal bones.

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

a) Carotid triangle.
b) Carpal tunnel syndrome.
c) Locking and unlocking of knee joint.
d) Right coronary artery.
e) Types of sulci of cerebral hemesphere with examples of each.
f) Deltoid muscle.

Section - B LAQ (30 Marks)

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

   a) Describe Arches of foot under heading of

      i) Classification of arches

      ii) Maintenance of arches

      iii) Clinical anatomy

   b) Describe Shoulder joint under heading of

      i) Classification

      ii) Ligaments

      iii) Movements and muscle producing movements

      iv) Blood and Nerve supply

      v) Clinical anatomy

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

   a) Describe cerebellum under the heading of

      i) External features

      ii) Connections and functions

      iii) Clinical anatomy

   b) Describe Glossopharyngeal nerve under the heading of

      i) Extracranial course with diagragm

      ii) Enumerate functional components and nuclei

      iii) Branches and distribution

      iv) Clinical anatomy

▽▽▽▽