63111

First B.P.Th. (2012) Examination, Winter 2017
HUMAN ANATOMY

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 **(50 Marks)**
SAQ

1. Short answer question (**any five** out of six) : **(5×3=15)**
   a) Enumerate Muscles supplied by femoral nerve.
   b) Enumerate branches of External carotid artery.
   c) Sternocleidomastoid muscle.
   d) Carpal tunnel syndrome.
   e) Elastic cartilage.
   f) Structures opening in Right atrium.

2. Short answer question (**any five** out of six) : **(5×7=35)**
   a) Describe Boundaries and Contents of Popliteal Fossa.
   b) The Posterior triangle of Neck -Boundaries, contents and applied.
   c) Radial nerve.
   d) Temporo Mandibular Joint - Movements and applied anatomy.
   e) Femoral sheath.
   f) Superior and Inferior Radioulnar Joint.

P.T.O.

SECTION – B (30 Marks)
LAQ

3. Long answer question (**any one** out of two) : **(1×15=15)**
   a) Describe the Shoulder Joint in detail.
   b) Describe ankle joint as under A. Formation B. Ligaments C. Blood supply D. Movements E. Applied anatomy.

4. Long answer question (**any one** out of two) : **(1×15=15)**
   a) Describe Glossopharyngeal nerve with course, relations and branches.
   b) Describe sulci and Gyri of superolateral, medial and inferior surfaces of cerebral hemisphere.

63112

First B.P.Th. (2012) Examination, Winter 2017
HUMAN PHYSIOLOGY

Total Duration : Section A + B = 3 Hours | Total Marks : 80

SECTION – A and SECTION – B

Instructions :
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 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) State Landsteiner's law. Describe "ABO" blood group system.
   b) Functions of Liver.
   c) Errors of refraction.
   d) Factors affecting Glomerular filtration rate.
   e) Cushing's syndrome.
   f) Role of hypothalamus in body temperature regulation.

2. Short answer question (**any five** out of six) : **(5×7=35)**
   a) Origin and spread of cardiac impulse.
   b) Classify the nerve fibers. Add a note on saltatory conduction.
   c) Explain the 'milk let down' reflex.
   d) Functions of cerebellum.
   e) Draw a neat and labeled diagram of oxygen-hemoglobin dissociation curve. State the factors causing the shift to right.
   f) Define homeostasis. Explain the various feedback mechanisms with examples.

P.T.O.

SECTION – B LAQ (30 Marks)

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

   a) Describe the contractile and regulatory proteins of the skeletal muscle. Discuss the molecular mechanism of muscle contraction. Add a note on energy sources for muscle contraction.

   b) Discuss in detail the various properties of skeletal, cardiac and smooth muscle.

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

   a) Define and classify pain. Describe the pain pathways. Add a note on analgesic system of brain.

   b) Define Cardiac Cycle. Explain in detail the various phases of cardiac cycle. Draw and label the Pressure – Volume curves occurring during cardiac cycle.

63113

First B.P.Th. (2012) Examination, Winter 2017
BIOCHEMISTRY

Total Duration : 2 Hours | Total Marks : 40

Instructions : *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 sake, the distribution has been done.
*7) **Use** a common answerbook for **all** Sections.*

1. Short answer question (**any five** out of six) : **(5×3=15)**
   a) Write note on cardiac enzymes.
   b) Mechanism of steroid hormone action.
   c) Discuss biochemical events during muscle contraction.
   d) Define specific Dynamic Action and give its significance.
   e) Discuss Transamination and its significance. Add a note on diagnostically important Transaminases.
   f) Give functions of Magnesium and Zinc.

2. Short answer question (**any five** out of six) : **(5×5=25)**
   a) Discuss Diabetes Mellitus and metabolic changes in carbohydrate, protein, lipid in it.
   b) Give an account of sources, functions, RDA and deficiency manifestations of Vitamin C.
   c) Discuss Beta-oxidation of fatty acids with its energetics.
   d) Describe Urea cycle. Discuss its regulation and disorders.
   e) Define Enzyme Inhibition. Discuss types of inhibition with suitable examples.
   f) Name the ketone bodies. Discuss the metabolism and significance of ketone bodies.

63114

First BPTH (2012) Examination, Winter 2017
FUNDAMENTALS OF KINESIOLOGY AND KINESIOTHERAPY

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) : **(5x3=15)**
   a) Shoulder Wheel.
   b) Write a note on movable pulley.
   c) Trikonasana.
   d) Importance of warm up exercises.
   e) Write a note on Parallelogram of forces.
   f) Axes and Planes.

2. Short answer question (**any five** out of six) : **(5x7=35)**
   a) Effects and uses of Free Exercises.
   b) Explain Hanging as a Starting position. Write its muscle work.
   c) Define Relaxation. Describe any one method in detail.
   d) Physiological effects of massage.
   e) Effects and uses of Group Exercises.
   f) Newtons laws of motion.

P.T.O.

SECTION – B **LAQ (30 Marks)**

3. Long answer question (**any one** out of two) : **(1x15=15)**

   a) Write the principles of suspension therapy. Explain Axial suspension in detail with its effects and uses.

   b) Define a lever. Which are the different types of levers ? Write in detail about the different types of levers with one example each in the human body.

4. Long answer question (**any one** out of two) : **(1x15=15)**

   a) Describe types of Goniometers. What are uses of Goniometry ? Write principles of Goniometry.

   b) Define Passive movements. Write about the classification and indication of passive movements. Write about the effects and uses of passive movements.

63115

First B.P.Th. 2012 Examination, Winter 2017
FUNDAMENTALS OF ELECTRO THERAPY

Total Duration : Section A + B = 3 Hours | Total Marks : 80

SECTION – A and 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) Define cosine law and grothus law.
   b) Define electric shock.
   c) Write a note on coupling media used for delivering Ultrasound.
   d) Explain the use of cartridge fuse.
   e) Define capacitance and state its unit.
   f) Write the types of Infrared Lamps with their corresponding wave lengths.

2. Short answer question (**any five** out of six) : **(5×7=35)**
   a) Explain the laws governing electromagnetic radiation.
   b) Differentiate between faradic and galvanic current.
   c) Write the production of ultraviolet radiations in kromayers lamp.
   d) Explain the principle and production of interferential therapy.
   e) Write the full form of LASER and write the properties of laser.
   f) Explain the construction of hydrocolator packs.

P.T.O.

SECTION – B LAQ **(30 Marks)**

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

   a) Define cryotherapy. Explain its physiological effects. Explain any three methods of application of cryotherapy. **(2+7+6)**

   b) What are superficial heating agents ? Add a note on its physiological effects. Explain in detail about paraffin wax bath therapy. **(2+7+6)**

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

   a) Write the therapeutic frequencies of Ultrasound. Explain the production and draw the panel diagram. **(2+7+6)**

   b) Write the frequency and wave length of short wave diathermy. Write the production of SWD. Draw the panel diagram of the same. **(2+8+5)**