63111

First B.P.Th. (2012) Examination, Winter 2018
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 **SAQ (50 Marks)**

1. Short answer question (**any five** out of six) : **(5×3=15)**
   a) Enumerate the branches of axillary artery.
   b) Anterior relations of the left kidney.
   c) Mention the parts and blood supply of uterine tube.
   d) Classification of synovial joints.
   e) Enumerate various positions of vermiform appendix.
   f) Enumerate the contents of middle ear.

2. Short answer question (**any five** out of six) : **(5×7=35)**
   a) Popliteal fossa
   b) Supports of Uterus
   c) Boundaries and contents of carotid triangle.
   d) Opening in thoracoabdominal diaphragm.
   e) Blood supply and relations of thyroid gland.
   f) Origin, insertion, nerve supply, actions of brachioradialis muscle

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SECTION – B **LAQ (30 Marks)**

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

   a) Describe hip joint under the following headings :

      i) Type

      ii) Articular surfaces and ligaments

      iii) Movements and muscles causing them iv) Applied anatomy

   b) Describe shoulder joint under the following headings :

      i) Type

      ii) Articular surfaces and ligaments

      iii) Movements and muscles causing them

      iv) Applied anatomy.

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

   a) Describe the lateral ventricle of brain under the following headings :

      i) Parts

      ii) Boundaries of each part

      iii) Applied anatomy.

   b) Describe the facial Nerve under the following headings :

      i) Functional components

      ii) Nuclei

      iii) Course

      iv) Branches

      v) Clinical anatomy.

63112

First B.P.Th. (2012) Examination, Winter 2018
HUMAN PHYSIOLOGY

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

SECTION – A & 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 (50 Marks)
(SAQ)

1. Short answer question (**any five** out of six) : **(5×3=15)**
   a) Resting membrane potential.
   b) Functions of platelets.
   c) Hypermetropia.
   d) Functions of saliva.
   e) Functions of proximal convulated tubule.
   f) Ovulation.

2. Short answer question (**any five** out of six) : **(5×7=35)**
   a) Describe the role of calcium in our body.
   b) Describe the functions of thyroid hormones.

P.T.O.

c) Describe the properties of receptors.

d) Enumerate the properties of cardiac muscle. Explain any two properties in detail.

e) Pulmonary surfactant.

f) Describe the mechanism of muscle contraction.

SECTION – B (30 Marks)
(LAQ)

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

a) Define blood pressure. Explain the long term regulation of blood pressure.

b) Describe the functions of hypothalamus.

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

a) Describe the mechanics of respiration.

b) Explain the origin, insertion, termination and functions of pyramidal tract.

63113

First B.P.T.H. (2012) Examination, Winter 2018
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) Compare the functions of DNA and RNA.
   b) Describe the role of cyclic AMP as a second messenger.
   c) Explain Liver function tests based on detoxification function.
   d) What are Kwashiorkor and marasmus ? Compare their features.
   e) Write note on dehydration.
   f) State the functions and deficiency disorders of iron.

2. Short answer question (**any five** out of six) : (5×5=25)
   a) Define the isoenzymes. Write the diagnostic importance.
   b) Describe sources, daily requirement, functions and deficiency manifestations of vitamin C.
   c) What are the ketone bodies ? Write an account on ketogenesis with its regulation.
   d) Define proteins and classify functionally with suitable examples.
   e) Draw flow chart of glycolytic pathway and write its significance.
   f) Write a note on obesity.

63114

First B.P.Th. (2012) Examination, Winter 2018
FUNDAMENTALS OF KINESIOLOGY AND KINESIOTHERAPY

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) Newton's 3rd law of motion.
   b) Uses of Bhujangasana.
   c) Define center of gravity.
   d) Describe types of pulleys and its uses.
   e) Describe parallel bars and its 2 uses.
   f) Describe eccentric muscle action with one example.

2. Short answer question (**any five** out of six) : **(5×7=35)**
   a) Give uses of mobility aids in physiotherapy and describe any two mobility aids for upper extremity.
   b) Write types of equilibrium with one example of each.
   c) Describe hanging as starting position. Give its muscle work.
   d) Enumerate different types of suspension. Describe vertical suspension in detail with one example.
   e) Write indications and contraindications for hydrotherapy.
   f) Describe different axes and planes. Describe axis and plane for hip flexion movement.

P.T.O.

SECTION – B LAQ (30 Marks)

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

   a) Describe principle of relaxation. Describe Jacobson's and reciprocal method of relaxation. **(5+10)**

   b) Write in detail types of Goniometers. Write merits and demerits of Goniometer. Explain Universal Goniometer in detail. **(2+4+4+5)**

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

   a) Write about uses of warm up and cool down exercises. Describe the merits of group exercises and write in detail about organization of group exercises. **(3+3+4+5)**

   b) Explain the types and principles of Active Movements. Mention differences between Active and Passive Movements with one example each. **(10+5)**

63115

First B.P.T.H. (2012) Examination, Winter 2018
FUNDAMENTALS OF ELECTROTHERAPY

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 answer book for **all** Sections.*

SECTION "A" **(SAQ) (50 Marks)**

1. Short answer question (**any five** out of six) : **(5×3=15)**
   a) Describe modes of heat transfer.
   b) What is Latent heat?
   c) State Inverse square law with application.
   d) Describe Action potential.
   e) Discuss the properties of LASER.
   f) Define Faradic and Galvanic current.

2. Short answer question (**any five** out of six) : **(5×7=35)**
   a) Describe various generators of Infra Red radiation.
   b) Describe Contrast bath and its application.
   c) Describe working and importance of Kromayer Lamp.
   d) Production of He-Ne Laser.
   e) Short answer on Hydrocollator hot packs and its application.
   f) Describe production of therapeutic Ultrasound.

P.T.O.

SECTION "B" **(LAQ) (30 Marks)**

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

   a) Discuss in detail physiological effects and therapeutic effects of heat therapy. Add a note on various methods of application of Paraffin wax bath. **(9+6)**

   b) Define Short Wave Diathermy (S.W.D). Discuss in detail about valve circuit diagram for production of S.W.D along with different types of electrodes used. **(2+9+4)**

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

   a) What is Cryotherapy ? Write down the physiological and therapeutic effects of cryotherapy. Add a note on various methods of application of cryotherapy. **(1+9+5)**

   b) Classify currents based on frequency with examples. Add a note on pain modulation theories. Discuss about various modes of TENS. **(6+4+5)**