



63902

First BPTH (Revised) Exam, Winter 2014

Human Physiology

(Syllabus of Revised is Applicable to Old/New)

Total Duration : Section A + B = 3 Hours

Total Marks : 80

Section - A &amp; 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 section.

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

1. Short answer question (any five out of six) : (5x3=15)
  - a) Structure of nephron
  - b) Functions of blood
  - c) Corpus luteum
  - d) Role of oxytocine in milk ejection reflex.
  - e) Landsteiner's Law
  - f) .Hypermetropia
2. Short answer question (any five out of six) : (5x7=35)
  - a) Origin & spread of cardiac impulse
  - b) What is hypoxia? Explain any two of them.
  - c) Cardio-respiratory changes during mild exercise.
  - d) Heart rate & its regulation.
  - e) Define diffusion. Describe different types of diffusion across cell membrane.
  - f) .Describe Short term regulation of blood pressure.

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

3. Long answer question (any one out of two) :

(1x15=15)

- a) Describe the structure of neuro-muscular junction(NMJ) with the help of a well labelled diagram.
- a) Explain the mechanism of transmission of nerve impulse across the NMJ.
- b) Describe the properties of skeletal muscle & add a note on structure of sarcomere.

4. Long answer question (any one out of two) :

(1x15=15)

- a) Describe origin, Course, termination & functions of Pyramidal tract(10). Write the differences between upper & lower motor neuron lesions(05).
  - b) Describe origin, course, termination of dorsal column medical lemniscus system with the help of a well labeled diagram (12). Name the sensations carried by this pathway(03).
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**First B.P.Th. (2012) Examination, Summer 2016  
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.
  - 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) Platelets.
  - b) Functions of bile.
  - c) Parathormone.
  - d) Factors affecting GFR.
  - e) Facilitated diffusion.
  - f) Dark adaptation.
  
2. Short answer question (any five out of six) : (5×7=35)
  - a) Draw and write details of ECG in lead 2.
  - b) Carbon dioxide transport in the body.
  - c) Cardiorespiratory changes during moderate exercise.
  - d) Physiological changes at high altitude.
  - e) Enumerate functions of cerebellum.
  - f) Strength duration curve.

P.T.O.



## SECTION – B LAQ (30 Marks)

3. Long answer question (**any one** out of two) : (1×15=15)
- a) Define motor unit. Describe in detail the factors controlling the tension development in the skeletal muscle.
  - b) Draw neat label diagram of sarcoplasmic reticulum in skeletal muscle. What are the differences in sarcoplasmic reticulum of skeletal and cardiac muscle ? Write the process of excitation contraction coupling in a skeletal muscle.
4. Long answer question (**any one** out of two) : (1×15=15)
- a) Define and classify synapse. Draw well labelled diagram of the synapse. Enumerate and Explain various properties of synapse.
  - b) Define cardiac cycle. Explain various events in cardiac cycle. Draw well labelled diagram of pressure volume changes in the left ventricle.
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**First B.P.Th. (2012) Examination, Summer 2015**  
**HUMAN PHYSIOLOGY – II**

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) Draw a neat and labelled diagram of nerve action potential. State the ionic basis of each phase.
  - b) State the metabolic functions of Liver.
  - c) State the differences between cortical and juxta -medullary nephrons.
  - d) Enumerate steps of Haemostasis and state the functions of Platelets.
  - e) Explain the errors of Refraction.
  - f) Functions of estrogen.
  
2. Short answer question (**any five** out of six) : (5×7=35)
  - a) Draw a neat and labelled diagram of Neuro-muscular junction. Add a note on acetylcholine.
  - b) State the physiological actions of thyroid hormone.
  - c) Oxygen Debt.
  - d) Describe the functions of cerebellum.
  - e) Draw a neat and labelled diagram of ECG in lead II. Add a note on P-R interval.
  - f) Define hypoxia. Explain any one type of hypoxia in detail.

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## SECTION – B LAQ (30 Marks)

3. Long answer question (**any one** out of two) : **(1×15=15)**
- a) Define Arterial Blood Pressure. Give its normal value. Enlist the various regulating mechanisms. Describe the Baroreceptor reflex in detail.
  - b) Describe the Nervous regulation of respiration.
4. Long answer question (**any one** out of two) : **(1×15=15)**
- a) Draw a neat and labelled diagram of muscle spindle. Describe its role in maintenance of muscle tone.
  - b) Discuss in detail the various properties of skeletal muscle. Add a note on strength duration curve.
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First B.P.Th. (2012) Examination, Summer 2015  
HUMAN ANATOMY – I

Duration : Section A + B = 3 Hours

Total Marks : 80

SECTION – A & SECTION – B

- Instructions :**
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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 answer book for **all** Section.

SECTION – A **SAQ** (50 Marks)

1. Short answer question (**any five** out of six) : (5×3=15)
- a) Enumerate the openings in the left atrium of the heart.
  - b) Enumerate the structures at the porta hepatis of liver.
  - c) Name the salivary glands and specify their locations.
  - d) Name the structures related to the mediastinal surface of right lung.
  - e) Specify the posterior relations of the left kidney.
  - f) Name the parts of the uterus with the help of a diagram.

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2. Short answer question (**any five** out of six) : (5×7=35)
- a) Describe the quadriceps femoris.
  - b) Enumerate the movements of the first carpometacarpal joint specify the muscles producing the movement.
  - c) Describe the axillary nerve.
  - d) Enumerate the muscles of mastication and specify their nerve supply.
  - e) Describe the oculomotor nerve.
  - f) Describe the brachioradialis muscle.

**SECTION – B LAQ (30 Marks)**

3. Long answer question (**any one** out of two) : (1×15=15)
- a) Describe the hip joint under the following heads :
    - (i) Ligaments (2 marks)
    - (ii) Relations with the help of a diagram (4 marks)
    - (iii) Movements and muscles producing them (9 marks)
  - b) Describe the radial nerve under the following heads :
    - (i) Formation and root value (2 marks)
    - (ii) Course and relations (3 marks)
    - (iii) Branches and distribution (8 marks)
    - (iv) Applied anatomy (2 marks)
4. Long answer question (**any one** out of two) : (1×15=15)
- a) Describe the hypoglossal nerve under the following heads :
    - (i) Nucleus and functional component (2 marks)
    - (ii) Course and relations (5 marks)
    - (iii) Branches and distribution (7 marks)
    - (iv) Applied anatomy (1 mark)
  - b) Describe the cerebellum under the following heads :
    - (i) Subdivisions, lobes and fissures (3 marks)
    - (ii) Connections (6 marks)
    - (iii) Functions (3 marks)
    - (iv) Applied anatomy (3 marks)



First B.P.Th. (Revised) Examination, Summer 2012  
HUMAN ANATOMY

Total Duration: Section A + B + C = 3 Hours

Section B & C Marks: 60

SECTION – B & SECTION – C

- Instructions:**
- 1) **All questions are compulsory.**
  - 2) **The number to the right indicates full marks.**
  - 3) **Draw diagrams wherever necessary.**
  - 4) **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.**
  - 5) **Answer each Section in the respective answerbook only. Answers written in the inappropriate Sectional answer books will not be assessed in any case.**

SECTION – B

2. Answer the following (any five out of six) : (5×3=15)
  - a) Meckel's diverticulum.
  - b) Applied Anatomy of spleen.
  - c) Write the nerve supply of urinary bladder and write any two applied importance.
  - d) Write the age changes in prostate.
  - e) Coronary sinus.
  - f) Great saphenous vein.
  
3. Answer the following (any three out of four) : (3×5=15)
  - a) Relations of mediastinal surface of right lung.
  - b) Posterior mediastinum.
  - c) Boundaries and contents of axilla.
  - d) Sternocleidomastoid muscle.



## SECTION – C

4. Describe the first carpometacarpal joint under following headings : (1×15=15)
- i) Type and Articular surface.
  - ii) Ligaments.
  - iii) Relations.
  - iv) Movements and muscles producing movements.
  - v) Applied Anatomy.
5. Describe the Hypoglossal nerve under following headings : (1×15=15)
- i) Nuclei and functional components.
  - ii) Intracranial course.
  - iii) Extracranial course.
  - iv) Branches and Distribution.
  - v) Applied Anatomy.
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First BPTH (2012), Winter 2014

Human Anatomy-I

Total Duration : Section A + B = 3 Hours

Total Marks : 80

## Section-A &amp; Section-B

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- 7) Use a common answer book for all section.

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

1. **Short answer question (any five out of six) :** (5x3=15)
  - a) Draw and label structures forming the stomach bed.
  - b) Enumerate the branches of external carotid artery.
  - c) Draw and label circle of Willis.
  - d) Enumerate supports of bladder.
  - e) Enumerate the structures passing under the flexor retinaculum.
  - f) Enumerate the extraocular muscles.
  
2. **Short answer question (any five out of six) :** (5x7=35)
  - a) Medial longitudinal arch.
  - b) Rectus sheath.
  - c) Left coronary artery.
  - d) Popliteal fossa.
  - e) Draw and label transverse section of medulla at the level of pyramidal decussation.
  - f) Gluteus maximus muscle.

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

3. **Long answer question (any one out of two) :** (1x15=15)
  - a) Describe the wrist joint and add a note on its applied anatomy.
  - b) Describe the knee joint and give its applied anatomy.

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4. Long answer question (any one out of two) :

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- a) Describe the cerebellum and add a note on its applied anatomy.
  - b) Describe the hypoglossal nerve and add a note on its applied anatomy
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**First B.P.Th. (2012) Examination, Winter 2016  
HUMAN ANATOMY**

Total Duration : 3 Hours

Total Marks : 80

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  - 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) Enumerate the branches of arch of aorta.
  - b) Specify the coverings of testis.
  - c) Enumerate the extraocular muscles supplied by oculomotor nerve.
  - d) Name the muscles of mastication. Specify their nerve supply.
  - e) Enumerate the arteries supplying stomach.
  - f) Draw and label a diagram depicting the histology of skeletal muscle.
  
2. Short answer question (**any five** out of six) : (5×7=35)
  - a) Specify the boundaries and contents of axilla.
  - b) Specify the commencement, course, branches and distribution of sciatic nerve.
  - c) Specify the attachments, nerve supply and actions of sternocleidomastoid muscle.
  - d) Describe the right atrium.
  - e) Specify the boundaries and contents of femoral triangle.
  - f) Specify the attachments, nerve supply and actions of hamstring muscles.

P.T.O.



## SECTION "B" LAQ (30 Marks)

3. Long answer question (**any one** out of two) : (1×15=15)
- a) Describe knee joint under the following headings.
- i) Type of joint and articular surfaces. 4
  - ii) Ligaments. 4
  - iii) Movements and muscles producing them. 5
  - iv) Applied anatomy. 2
- b) Describe shoulder joint under the following headings.
- i) Type of joint and articular surfaces. 2
  - ii) Ligaments. 3
  - iii) Relations. 3
  - iv) Movements and muscles producing them. 5
  - v) Applied anatomy. 2
4. Long answer question (**any one** out of two) : (1×15=15)
- a) Describe the cerebellum under the following headings.
- i) Lobes, fissures, surfaces. 5
  - ii) Functional classification. 3
  - iii) Cerebellar peduncles. 4
  - iv) Applied anatomy. 3
- b) Describe the hypoglossal nerve under the following headings.
- i) Nucleus and functional components. 2
  - ii) Intracranial course. 3
  - iii) Extra cranial course. 3
  - iv) Branches and distribution. 5
  - v) Applied anatomy. 2
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