



63115

First B.P.Th. (2012) Examination, Summer 2018  
FUNDAMENTALS OF ELECTRO THERAPY

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) Describe methods to reduce skin resistance.
  - b) Eddy currents.
  - c) Ohms law.
  - d) What is earthing ? Explain its importance.
  - e) Write construction of Whirl Pool bath.
  - f) Write three uses of rheostat in electrotherapy equipment.

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2. Short answer question (**any five** out of six) : (5×7=35)
- a) Define electric shock. Write in details about precautions and treatment following shock..
  - b) Describe physiological effects of Cryotherapy with uses.
  - c) Draw panel diagram and write testing of Electrical Muscle Stimulator.
  - d) Describe production of Interferential (IF) current. Draw a neat labelled panel diagram of the IFT unit.
  - e) Explain luminous and non-luminous IR generators.
  - f) Describe laws governing radiation.

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

3. Long answer question (**any one** out of two) : (1×15=15)
- a) Describe contrast bath and explain its physiological and therapeutic effects. Write a note on technique of application. (10+5)
  - b) Describe production of Short Wave Diathermy (SWD). Draw panel diagram of SWD and describe testing of SWD. (7+5+3)
4. Long answer question (**any one** out of two) : (1×15=15)
- a) Describe the construction of UVR lamp. Describe the production of UVR. Add a note on Tridymite formation. (5+7+3)
  - b) Describe the construction, working and functions of transformer. (5+5+5)
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**First B.P.Th. (2012) Examination, Summer 2018**  
**BIOCHEMISTRY**

Total Duration : 2 Hours

Total Marks : 40

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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 answerbook for **all** Sections.

1. Short answer question (**any five** out of six) : (5×3=15)
  - a) Name ketone bodies. Elaborate the pathway of ketogenesis.
  - b) Explain factors affecting enzyme action.
  - c) Write a note on specific dynamic action.
  - d) Draw schematic representation of Citric acid cycle.
  - e) Discuss functions of calcium.
  - f) Write short on Gout.
  
2. Short answer question (**any five** out of six) : (5×5=25)
  - a) Describe mechanisms and biochemical events during muscle contraction.
  - b) Give an account of diagnostic use of enzymes and isoenzymes.
  - c) Define proteins. Classify proteins depending on their functions with suitable examples.
  - d) Classify hormones on basis of their action with suitable examples. Explain role of cAMP as second messenger of hormone action.
  - e) Explain oxidation of palmitic acid along with its energetics.
  - f) Write dietary sources, RDA, biochemical functions and deficiency manifestations of Vitamin B1.



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**First B.P.Th. (2012) Examination, Summer 2018  
HUMAN ANATOMY**

Total Duration : Section A + B = 3 Hours

Total Marks : 80

**SECTION – A & SECTION – B**

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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) Abduction at Shoulder joint.
  - b) Pectoralis major.
  - c) Mention Boundaries and contents of Popliteal Fossa.
  - d) Right coronary artery.
  - e) Axillary Nerve.
  - f) Fibrocartilage.

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2. Short answer question (**any five** out of six) :

(5×7=35)

- a) Adductor canal.
- b) Supination and Pronation movements.
- c) Floor of Fourth Ventricle.
- d) Describe Typical intercostal space.
- e) Medial longitudinal arch.
- f) Femoral Nerve – formation, course, branches and applied anatomy.

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

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

(1×15=15)

- a) Describe Mammary gland in Female under following heads
  - i) Situation
  - ii) Relation
  - iii) Blood supply
  - iv) Lymphatic drainage
  - v) Applied
- b) Describe the Knee joint in detail. Add a note on locking and unlocking of Knee joint.

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

(1×15=15)

- a) Describe the Hypoglossal nerve under following heads :
    - i) Nuclei and Functional components
    - ii) Course and Branches
    - iii) Applied anatomy
  - b) Describe Cerebellum under following heads :
    - i) Surfaces and lobes
    - ii) Vermis
    - iii) Blood supply
    - iv) Functions
    - v) Applied
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First B.P.Th. 2012 Examination, Summer 2018  
HUMAN PHYSIOLOGY

Total Duration : Section A + B = 3 Hours

Total Marks : 80

## SECTION – A &amp; SECTION – B

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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 answerbook for **all** Sections.

## SECTION – "A" SAQ (50 Marks)

1. Short answer question (**any five** out of six) : (5×3=15)
  - a) Active transport.
  - b) Composition and functions of blood.
  - c) Write the actions of testosterone.
  - d) Draw and label visual pathway.
  - e) Glomerular Filtration Rate.(GFR)
  - f) Composition and function of gastric juice.
2. Short answer question (**any five** out of six) : (5×7=35)
  - a) Ventricular events in cardiac cycle.
  - b) Transport of carbon dioxide in blood.
  - c) Effect of exercise on muscle power and endurance.

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- d) Basal metabolic rate .
- ✓ e) Neural regulation of respiration
- ✓ f) Actions of thyroid hormones.

SECTION – "B" LAQ (30 Marks)

3. Long answer question (any one out of two) : (1×15=15)
- ✓ a) Draw and label neuromuscular junction. Describe the transmission of signal across it. Add a note on myasthenia gravis.
  - b) Describe the properties of nerve fiber. Classify the nerve fibers. Add a note on Wallerian degeneration.
4. Long answer question (any one out of two) : (1×15=15)
- ✓ a) Enumerate the ascending tracts. Describe the pathway of touch sensation.
  - b) Define reflex action and draw a neat labelled diagram of reflex arc. Classify reflexes. Add a note on stretch reflex.
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**First B.P.Th. (2012) Examination, Summer 2018**  
**FUNDAMENTALS OF KINESIOLOGY AND KINESIOTHERAPY**

Total Duration : Section A + B = 3 Hours

Total Marks : 80

**SECTION – A & SECTION – B**

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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) Write advantages of group therapy.
  - b) Define axis and plane. Enumerate types of it.
  - c) Enumerate components of the aerobic exercise program.
  - d) Describe Shoulder Wheel and uses of it.
  - e) Three advantages of free active exercises.
  - f) Define active and passive insufficiency with suitable example.

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2. Short answer question (**any five** out of six) :

(5×7=35)

- a) Enumerate and describe any three positions derived from standing by alteration of legs.
- b) What is suspension therapy ? Explain the types of suspension therapy in detail.
- c) Write physical properties of water.
- d) Define lever. Explain types of lever giving suitable examples with respect to human body.
- e) Define goniometry, write principles and uses of goniometry. Add a note on universal goniometer.
- f) What is pulley ? Describe types of pulley. Add a note on anatomical pulley.

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

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

(1×15=15)

- a) Define Yoga and describe principles of Yoga. Explain any 4 asanas in supine lying position. (7+8)
- b) Define movement and write in detail about classification of movement. Write the principles, effects and uses of passive movements. (7+8)

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

(1×15=15)

- a) Define Relaxation and describe general and local techniques of relaxation. Write effects and uses of each. (8+7)
  - b) Define and classify massage manipulation. Write effects and uses of massage. write contraindications of massage
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