

## FIRST B.A.M.S DEGREE EXAMINATION – OCTOBER 2013

## PAPER IV – KRIYA SHARIR - I

Q.P. CODE : 641354

Time: Three Hours

Maximum: 100 Marks

## ANSWER ALL QUESTIONS

## I. Essay Questions.

(2 x 15 = 30 Marks)

1. What are all the fundamental principles of *Kriya Sharira*? Write in nutshell about any five concepts.
2. Classification of Salivary glands, locate major glands in a diagram. Describe the composition of Saliva, functions of Saliva, and regulation of Saliva.

## II. Short Notes.

(10 x 5 = 50 Marks)

1. *Vaak Pravrutti* as per Ayurveda.
2. Report the specific functions of the varieties of *Kapha Dosha*.
3. Classify *Dosha Vaishamya*, write their *Karana* and *Sambandha* with *Kriyakala*.
4. Write the physical and psychic attributes of *Rajasika Prakruti*.
5. Explain in sequence: *Ahara Paka Krama*.
6. Mention any five processes through which the body achieves Homeostasis.
7. Write about the applied physiology of Vitamins.
8. Liver is a vital organ. Justify.
9. Specify the functions of Frontal lobe of Cerebral cortex.
10. State the role of Limbic system in our routine life.

## III. Short Answers.

(10 x 2 = 20 Marks)

1. Write about *Sadhaka Pittam*.
  2. Mention the extra uterine factors influencing the *Deha Prakriti*.
  3. *Shaddhatu Purushasya Mahatvam*.
  4. Clarify whether *Tridosha* are subjected to diurnal variation? Cite reference.
  5. Find the inter-relationship between *Jataragni* and *Dhatwagni*.
  6. Mention the Acid-base buffer systems of the Human body.
  7. Draw a flow chart of divisions of Nervous system.
  8. Mention the types/names of Lung volume.
  9. Mention the classification of Hypoxia.
  10. In an individual with abnormal physiology following observations viz. hypertonic muscles, spastic paralysis and exaggerated deep reflexes were made. What is abnormal in his/her Nervous system?
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**FIRST B.A.M.S. DEGREE EXAMINATION****PART IV – KRIYA SHARIR - I***Q.P. Code : 641354***Time: Three hours****Maximum : 100 Marks****Answer All questions****I. Essay Questions:****(2 X 15 = 30)**

1. Description Of Purusha & Classification Of Purusha. Role Of Shadhatupurusha in Kriya Sharir &Chikitsa.
2. Write Mechanism of Digestion Including Role of Digestive Enzymes on Food throughout G.I.T.?

**II. Short Notes:****(10 X 5 = 50)**

1. Prakrutha Karma Of Shariraka Doshas.
2. Shwasa Prakriya as Per Ayurveda .
3. Who First mentioned names Of Pancha Vidha Kapha Dhosha? Write Each Kapha Dosha Functions.
4. Write in detail about Avasthapaka.
5. Explain Ashta Aharavidhi Viseshayatana
6. Methods of Artificial Respiration.
7. Functions of Different Parts of Brain.
8. Mechanism of Maintenance Of Homeostasis.
9. Physiology of Speech & Articulation.
10. Describe Manifestations Of Hypo & Hypervitaminosis.

**III. Short Answers:****(10 X 2 = 20)**

1. Write About *Apana Vatha*.
2. Function of Vata Dosha .
3. Describe Alochaka Pitta Bhedhas.
4. Name the types of Satvika Prakruti.
5. Relationship between *Agni* and *Pitta*.
6. Write about Acid –Base Balance.
7. Physiology of Temperature Regulation.
8. What is Enteric Nervous System.
9. Whether Pulse & Temperature of Body Interlinked? Explain.
10. What are the Functions of Large Intestines.

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**FIRST PROFESSIONAL B.A.M.S. DEGREE EXAMINATION****PAPER IV – KRIYA SHARIR - I***Q.P. Code : 641354***Time: Three Hours****Maximum: 100 marks****Answer ALL Questions****I. Essay Questions:****(2 x 15 = 30)**

1. What are the Fundamental Principles of Ayurvediya Kriya Sharir?  
Explain Elaborately?
2. Definition and Mechanisms of Maintenance of Homeostasis.

**II. Write notes on:****(10 x 5 = 50)**

1. Describe inter-relationship between Ritu-Dosha-Rasa-Guna.
2. Functions of Agni, Jatharagni, Bhutagni and Dhatvagni.
3. Define Prakriti? What are the intra-uterine and extra – uterine factors influencing Daha-Prakriti?
4. Describe about the genesis of Vata-Pitta-Kapha during Aharapaka process.
5. Explain types of Pitta Dosha.
6. Give an introduction to pulmonary function tests.
7. Digestion and metabolism of Proteins.
8. Exchange and transport of gases at Lungs.
9. Physiology of Central Nervous System.
10. Describe the composition of different Digestive Juices.

**III. Short Answers on:****(10 x 2 = 20)**

1. Define Vata Dosha.
2. Types of Kriya Kala as per Susruta.
3. Ahara Parinamkar Bhavas.
4. Description of Nishthapaka.
5. Rasi Purusha.
6. Explain Peristalsis.
7. Uses of Spirometry.
8. Physiology of Sleep.
9. Resting Membrane Potential.
10. Manifestations of Hypovitaminosis of Vitamin A.

**FIRST PROFESSIONAL B.A.M.S. DEGREE EXAMINATION**

**PAPER IV – KRIYA SHARIR - I**

*Q.P. Code : 641354*

**Time: Three Hours**

**Maximum: 100 marks**

**Answer ALL Questions**

**I. Essay Questions:**

**(2 x 15 = 30)**

1. Vyutpati, nirukti, general locations, properties and functions of Pitta Dosha and its classifications with specific locations, properties and functions.
2. Write Mechanism of Respiration? Explain Neural and Chemical control of Respiration.

**II. Write notes on:**

**(10 x 5 = 50)**

1. Explain concept of Kriya Kalas.
2. Describe Physiology of Speech in Ayurveda.
3. Detail about Ashta Aharavidhi Viseshtayatana.
4. Kshaya and Vriddhi lakshanas of Vata and Kapha Doshas.
5. Explain Deha Prakruti.
6. Describe transportation of various substances across Cell Membrane.
7. Functions of Salivary Glands and Stomach.
8. Mechanism of Propagation of Nerve Impulse.
9. Acid Base Balance-Explain.
10. Physiology of Autonomic Nervous System.

**III. Short Answers on:**

**(10 x 2 = 20)**

1. Write about Agni.
2. Function of Vyana Vata Dosha.
3. Name the Kapha Dosha Bhedhas.
4. Shaddhatuvatmaka Purusha.
5. Loka – Purusha Saamya.
6. Write about Electrolyte Balance.
7. Define Homeostasis.
8. Uses of EEG.
9. Composition of Pancreatic Juice.
10. Write Properties of Nerve.

**FIRST PROFESSIONAL B.A.M.S. DEGREE EXAMINATION****PAPER IV – KRIYA SHARIR - I****Q.P. Code : 641354****Time: Three Hours****Maximum: 100 marks****Answer ALL Questions****I. Essay Questions:****(2 x 15 = 30)**

1. Write about *Tridosha* on the following aspects: (a) *Nirukti* (b) *Sthana* and *Guna* (c) *Samanya Karma* (d) *Vridddhi Lakshana* (e) *Kshaya Lakshana*.
2. Elaborate the Intellectual functions of the Brain like Learning, Memory, Speech and Conditioned reflexes.

**II. Write notes on:****(10 x 5 = 50)**

1. Describe the concept of *Srotas* and classify them.
2. Tabulate the interrelationship of *Tridosha* with *Ritu* and *Rasa*.
3. Narrate the concept of *Kriyakala* according to Acharya *Vagbhatta*.
4. Write about the *Mahatvam* of *Agni*.
5. Enlist the physical and psychic characteristics of *Pitta Prakruti*.
6. Explain the physiology of Action Potential with diagrams.
7. Write in detail the nutritive importance of Fat-soluble Vitamins.
8. Write down the Reflexes of Digestive tract and explain any major one.
9. Describe the Neural regulation of Respiration.
10. Write the salient features of Enteric Nervous System.

**III. Short Answers on:****(10 x 2 = 20)**

1. Quote the *Apana Vata Karma*.
2. Mention the differences between *Agni* and *Pitta*.
3. Write the best available definition of *Prakriti*.
4. Name the factors of *Aharaparinamakaram*.
5. How will you identify the different *Koshta*?
6. In which way Neuroglia support the Nervous system?
7. Write about the basic physiology of exocrine pancreas.
8. Mention few important Gastro Intestinal hormones.
9. List out the Mechanical movements involving the Stomach.
10. Tidal volume is 500ml, Inspiratory reserve volume is 3300ml, Expiratory reserve volume is 1000ml, Residual volume is 1200ml. Find the Inspiratory capacity and Vital capacity.

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1. Write Vyutpatti, Nirukti, Paryaya, Bheda and the Specific Functions of Vata Dosha.
2. Explain in detail about Functions of Central Nervous System.

**II. Write Notes on:****(10 x 5 = 50)**

1. Narrate Aahaara Parinamakara bhaava.
2. Describe the Shatkriya Kala and its Clinical Importance.
3. Shwasa Prakriya – Ayurvedic Point of View.
4. Explain – Loka - Purusha Saamyam.
5. Mention the Kapha Prakriti Lakshanas.
6. Gas Exchange at Respiratory Membrane and Exchange at Tissue Level.
7. Functions of Liver and Bile.
8. Water Soluble Vitamins
9. Mechanism of Ventilation.
10. Metabolism of Protein.

**III. Short Answers on:****(10 x 2 = 20)**

1. Avalambhaka Kapha.
2. Name the Different Doshas involved in Aahaara Paaka Kriya and write its functions.
3. Describe Shad dhatuvaatmaka Purusha.
4. Prakruta and Vikruta Karma of Kapha.
5. Jataraagni.
6. Write Electrolyte Balance.
7. What is Resting Membrane Potential?
8. Differentiate Asphyxia and Hypoxia.
9. Movements of Gut.
10. Where does E.Coli resides? Mention their Functions.

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1. Definition, classification and significance of Ahara. Explain Ahara Vidhi Vidhana and Ashta Aharavidhi Viseshtayana.
2. Write Mechanism of Propagation of Nerve Impulse. Physiology of Sensory and Motor Nervous System.

**II. Write Notes on:****(10 x 5 = 50)**

1. Vyutpati, nirukti, general locations, properties and functions of Kapha Dosha.
2. Explain physiology of Speech in Ayurveda.
3. Write mutual relationship between Triguna-Tridosha and Panchamahabhuta.
4. Detail about types of Vata Dosha.
5. Explain Manasika Prakriti.
6. Methods of Artificial Respiration.
7. Functions of Intestines.
8. Mechanisms of Acid – Base Balance.
9. Physiology of Sleep and Dreams.
10. Describe digestion of Carbohydrates.

**III. Short Answers on:****(10 x 2 = 20)**

1. Describe Nishthapaka.
2. Function of Apana Vata Dosha.
3. Avalambhaka Kapha Dosha.
4. Importance of Agni.
5. Tatra Shareeram Naama ..... complete the sloka.
6. Types of Breath Sounds.
7. Physiology of Memory.
8. Functional classifications of Neurons.
9. In which condition Asphyxia will occur?
10. Define Autonomic Nervous System.

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**FIRST PROFESSIONAL B.A.M.S. DEGREE EXAMINATION**

**PAPER IV – KRIYA SHARIR - I**

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**Time: Three Hours**

**Maximum : 100 Marks**

**Answer all Questions**

**I. Essay Questions:**

**(2 x 15 = 30)**

1. Detail the concept of Prakruti in Ayurveda.
2. Explain the mechanism of secretion and composition of different Gastric juices and their role in digestion.

**II. Write Notes on:**

**(10 x 5 = 50)**

1. Describe Ashta Aharavidhi Vishesha Ayatana.
2. Loka Purusha Samya Siddhanta.
3. Write Prakruta and Vaikruta Dosha Karma.
4. Write the Annavaha Sroto Mula, Dushti Karana and Dushti Lakshana.
5. Explain Avastha Paka.
6. Explain Action Potential.
7. Mechanism of Acid- Base balance.
8. Speech physiology in detail.
9. Write about pulmonary function tests.
10. Write the source, daily requirement, the functions of vitamin B complex.

**III. Short Answers on:**

**(10 x 2 = 20)**

1. Write the relation between Jatharagni, Dhatwagni and Pachabhutagni.
2. Write types of Pitta dosha.
3. Functions of Spinal cord.
4. Write the uses of EEG.
5. Define Deglutition.
6. Role of Shad Dhatu Purusha in Chikitsa.
7. Ahara Parinamkar Bhavas.
8. Define ventilation.
9. Write about Apana Vata.
10. Explain Defecation Reflex.

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**Time: Three Hours**

**Maximum : 100 Marks**

**Answer all Questions**

**I. Essay Questions:**

**(2 x 15 = 30)**

1. Explain the mechanism of respiration.
2. Explain in detail the concept of Agni.

**II. Write Notes on:**

**(10 x 5 = 50)**

1. Write about Ahara Parinamakara Bhavas.
2. Define Purusha and its classifications.
3. Functions of Vitamins.
4. Write the functions of the Cerebellum.
5. Physiology of Speech.
6. Write Vyutpatti, Nirukti, Sthana, types and functions of Vata Dosha.
7. Explain fundamental principles of Ayurvediya Kriya Sharir.
8. Explain the factors influencing Deha Prakruti and write the Lakshanas of Sleshmala Prakruti.
9. Write the functions of the small intestine.
10. Explain the digestion and metabolism of Proteins.

**III. Short Answers on:**

**(10 x 2 = 20)**

1. Explain the relation between Rtu and Doshas.
2. Write the definition of Hypoxia and its types.
3. Write the relation between Triguna and Tridosha.
4. Write about Vital Capacity.
5. Sources of Vitamin A.
6. Jatharagni – Definition.
7. Components of Rashi Purusha.
8. Define balanced diet.
9. Functions of saliva.
10. Define Prakopa of Doshas.

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1. Definition and mechanisms of maintenance of Homeostasis.
2. Explain in detail Ahara Vidhi Vidhana and Avasthapaka.

**II. Write Notes on:****(10 x 5 = 50)**

1. Enumerate the classifications of Purusha.
2. Explain Types of Kapha and their functions.
3. Ashta Aharavidhi Viseshtayatana – Explain.
4. “Thyekta Dravatwam Pakadi Karmana Anala Shabditam” - explain the contextual meaning and state the differences and similarities between Agni and Pitta? Write a conclusion based on your inference, whether Agni and Pitta are one and the Same.
5. Detail the concept of Kriya Kala.
6. Describe the functions of the Liver in the process of digestion.
7. Explain the role of the Small Intestine in digestion and absorption.
8. Write the Functions of Salivary Glands.
9. Explain the classification of Nerve fibres.
10. Explain the physiology of temperature regulation.

**III. Short Answers on:****(10 x 2 = 20)**

1. Write the classification of Koshta and Dosha predominance responsible for each type.
2. “Acchapittam Udiryate”- Describe where and how?
3. Write the relation between Tridosha and Panchamahabhuta.
4. Functions of Pancreas.
5. Write about Vata Kasayam.
6. Write the daily requirement and sources of Vitamin K.
7. Define Sharira and its synonyms.
8. Role of Shad Dhatu Purusha in Chikitsa.
9. Define Digestive Peristalsis.
10. Digestive hormones.

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**Time: Three Hours**

**Maximum : 100 Marks**

**Answer all Questions**

**I. Essay Questions:**

**(2 x 15 = 30)**

1. Write in detail about Vyutpati, Nirukti, general locations, properties and functions of Pitta Dosha and its Sub-classifications with specific locations, properties and functions.
2. Describe the mechanism of propagation of Nerve Impulse and write about the physiology of Sensory and Motor Nervous System.

**II. Write Notes on:**

**(10 x 5 = 50)**

1. Explain the Concept of Panchamahabootha in detail.
2. Difference between Shaarir and Sharir.
3. Describe the interrelationship between Ritu-Dosha-Rasa-Guna.
4. Explain Kriyakala in detail.
5. Enumerate Kapha Dosha Vriddhi, Kshaya Kaarana and Lakshana in detail.
6. Explain Ahaara Paaka in detail.
7. Write the physical and psychic attributes of Raajasika Prakruti.
8. Write in detail about Jataragni in detail.
9. Mention any five processes through which the body achieves Homeostasis?
10. Describe the physiology of Speech and Articulation.

**III. Short Answers on:**

**(10 x 2 = 20)**

1. Write about Bodhaka Kapha.
2. Explain Resting Membrane Potential.
3. Define Defecation.
4. What are Functions of Salivary Glands?
5. Describe the components of Respiratory System.
6. Explain Krura Koshta.
7. Write about Vaata Vriddhi Lakshana.
8. What are the uses of Spirometry?
9. Write about Electrolyte Balance.
10. Write about few important secretions in the Gastro Intestinal Tract.

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