



RAN-1907000101030002-S

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**F.Y.B.H.M.S. Examination**

**January - 2020**

**Physiology & Biochemistry Paper-II**

**Time: 3 Hours ]**

**[ Total Marks: 100**

**सूचना : / Instructions**

(1)

नीचे दृष्टवित निशानीवाणी विगतो उत्तरवही पर अवश्य लभवी.  
Fill up strictly the details of signs on your answer book

Name of the Examination:

F.Y.B.H.M.S. Examination

Name of the Subject :

Physiology & Biochemistry Paper-II

Subject Code No.: 1907000101030002-S

Seat No.:

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Student's Signature

- (2) All questions are compulsory.
- (3) Figure to the right indicates full marks.
- (4) Write both sections separately.

**SECTION-I**

Q.1. Define synapse. Classify them. Write down mechanism of Synaptic transmission. Explain any six properties of Synapse. 15

**OR**

Q.1. Define Reflex. Draw a neat labelled diagram of Reflex Arc. Classify them. Write down any six properties of Reflexes. 15

Q.2. Define Lipids. Classify them. Write down their Properties and write a note on  $\beta$  Oxidation of fatty acids. 15

**OR**

Q.2. 1. Write down composition of Pancreatic Juice with its function. 08  
2. Name the Bile pigments & Bile salts. Write functions of Bile. 07

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**Q. 3. Write short notes on: (Any Three)**

- a. Functions of Liver.
- b. Absorption of Glucose.
- c. Properties of Receptors.
- d. Physiological importance of Thalamus.
- e. Draw neat labelled diagram of Taste Pathway.

15

**Q. 4. Answer in one word or sentence.**

- a. Different types of Stimulus.
- b. Define Astigmatism.
- c. What are taste buds?
- d. \_\_\_\_\_ cells of gastric mucosa secretes HCL.
- e. Rancidity is the property of which organic compound?

05

### SECTION-II

**Q. 1. Discuss Physiology of Endocrine Pancreas in terms of histology & role of its hormone. Write a note on Diabetes mellitus.**

15

**OR**

**Q. 1. Discuss Physiological aspects of Adrenal Medulla in terms of histology, hormone secreted with a note on its Applied Physiology.**

15

**Q. 2. Describe Physiology of Menstruation in detail.**

15

**OR**

**Q. 2. 1. Describe Spermatogenesis. Write different parts of Sperm.  
2. Describe Oogenesis.**

08

07

**Q. 3. Write short notes on : (Any Three)**

15

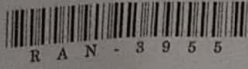
- a. Vitamin C.
- b. Calcitonin.
- c. Ovarian follicle.
- d. Anti diuretic hormone.
- e. Functions of Testosterone.

**Q. 4. Answer in one word or sentence.**

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- a. Hyposecretion of Growth hormone in adults causes \_\_\_\_\_ .
- b. Rickets is due to deficiency of vitamin \_\_\_\_\_ .
- c. Define Exocrine Gland.
- d. Define Puberty.
- e. Hormone's of Lactation.





**RAN-3955**

**First Year B.H.M.S. Examination**

**January - 2019**

**Human Physiology And Biochemistry Paper - II**

**[ Total Marks: 100**

**सूचना : / Instructions**

नीचे दृष्टविले निशानीवाणी विगतो उत्तरवही पर अवश्य लभवी.  
Fill up strictly the details of signs on your answer book

Name of the Examination:

First Year B.H.M.S. Examination

Name of the Subject :

Human Physiology And Biochemistry Paper - II

Subject Code No.: 3 9 5 5 Section No. (1, 2,.....): II

Seat No.:

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Student's Signature

- Instructions: 1) All questions are compulsory.  
2) Figures to the right indicate full marks.

**SECTION - I**

1. Describe Formation, Composition, circulation and Function of CSF. 15  
OR  
Explain in detail various functions of Hypothalamus.
2. Describe in detail Basal Metabolic Rate. 15  
OR  
Explain the Digestion, Absorption and Metabolism of carbohydrate in detail.
3. Write Short Notes. (Any 3) 15  
a) Different Types of receptors  
b) Myopia  
c) B-oxidation of Fat  
d) Movement of Stomach  
e) Neat label diagram of olfactory pathway

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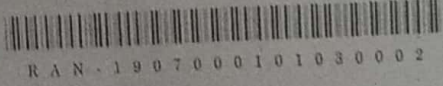
[ P.T.O. ]

4. **MCQ or Short Questions.**
- a) Definition :- Synapse
  - b) Normal Volume of Gastric Juice per Day.
  - c) Normal CSF contains WBC..... True / False.
  - d) Saliva contains which type of enzymes.
  - e) Length of Spinal Cord is .....

**SECTION - II**

- 1. Describe gluco corticoid in detail. 15  
 OR  
 Describe Physiology of Parathyroid Hormone in detail.
- 2. Describe Oestrogen in detail along with a note on ovulation. 15  
 OR  
 a) Describe endometrial Cycle. 8  
 b) Describe Spermatogenesis in detail. 7
- 3. **Short note. (Any three)** 15
  - a) Structure of orum.
  - b) Vitamin - A.
  - c) Glucagon.
  - d) Dwarfism.
  - e) Pubertal changes in female.
- 4. **Answer in one word or sentence.** 5
  - a) Name disease condition occurs due to increased secretion of GH after puberty.
  - b) Name hormone responsible for Milk Ejection.
  - c) Receptor for Steroid hormone located at \_\_\_\_\_.
  - d) Define oogenesis.
  - e) Define classical Hormones.





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**RAN-1907000101030002**

**First year B. H. M. S. Examination (New Course)**

**October / November - 2019**

**Human Physiology & Biochemistry: Paper-II**

[ Total Marks: 100

સૂચના : / Instructions

(1)

નીચે દર્શાવેલ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી.  
Fill up strictly the details of signs on your answer book

Name of the Examination:

First year B. H. M. S. (New Course)

Name of the Subject :

Human Physiology & Biochemistry: Paper-II

Subject Code No.: 3 9 5 5

Seat No.:

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Student's Signature

- (2) All questions are compulsory.
- (3) Figure to the right indicate full marks.
- (4) Write both section separately.

**SECTION - I**

- 1 Describe Tract of Gall & Burdach with respect to its origin, course & Termination in detail. 15
- OR
- 1 Describe Basal ganglia in detail. 15
- 2 Explain "Digestion and absorption of Protein". 15
- OR
- 2 (1) Rhythmic segmentation 8  
(2) Functions of Saliva 7
3. Write Short Notes : (Any Three) 15

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- (1) Function of Bile
- (2) Deglutition
- (3) Babinski's Sign
- (4) Function of CSF
- (5) Organ of Corti

4. Answer in one word or Sentence.

5

- (1) Define Neuron
- (2) Define Hypermetropia
- (3) Function of Cones
- (4) Define Defaecation
- (5) Define Glucolysis

### SECTION - II

1. Define Exocrine gland, Endocrine gland, Composite gland, Hormone & Target Organ. Discuss physiology of Posterior Pituitary gland with a note on its applied physiology. 15

OR

- 1 Describe physiological aspect of Thyroid gland with respect to Histology, Synthesis, role of hormone with a note on applied physiology of hyposecretion. 15
- 2 Define Puberty. What is pubertal age in boys and girls? Write in detail pubertal changes in both with a note on applied physiology. 15

OR

- 2 (a) Define Ovulation, Menstruation, Fertilization and implantation. Write down functions of Oestrogen. 8
- (b) Name the male sex hormones. Write down functions of Testosterone with a note on its applied physiology. 7

3. Write short note on: (Any three)

15

- 1) Vitamin C
- 2) Insulin
- 3) Structure of sperm
- 4) Role of oxytocin from posterior pituitary gland
- 5) Progesterone

4 Answer in one word or sentence.

5

- 1) \_\_\_\_\_ is the hormone secreted by supra optic cells of Hypothalamus.
- 2) Rickets is caused by deficiency of vitamin \_\_\_\_\_
- 3) Aldosterone hormone is secreted from \_\_\_\_\_ layer of adrenal cortex
- 4) What is Menarchy ?
- 5) Onset of reproductive life is called as \_\_\_\_\_.