



**First B.H.M.S. (New/2015) Examination, Winter 2017
PHYSIOLOGY INCLUDING BIOCHEMISTRY – I**

Total Duration : 3 Hours

Total Marks : 100

- 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.

1. Write short answer (**any ten** out of fifteen) : (10×2=20)
- a) Define blood.
 - b) What is Thrombocytopenia ?
 - c) Name types of Haemoglobin.
 - d) Name the Special Junctional Tissues of Heart.
 - e) Define Cardiac Cycle.
 - f) What is Pulse ?
 - g) What is Asphyxia ?
 - h) Define cynosis.
 - i) Name different parts of nephron.
 - j) Name stages of Urine formation.
 - k) Name the Glands in skin.
 - l) Define thermogenesis and thermolysis.
 - m) Define ultrafiltration.
 - n) Define Osmosis.
 - o) Define Hyperpyrexia and pyrexia.

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2. Write short answer (**any four** out of six) : (4×5=20)
- a) Thrombocyte.
 - b) R H Factor.
 - c) Heart Sound.
 - d) Cardiac Output.
 - e) Formation of lymph.
 - f) Function of liver. *Spleen* *Spleen*

3. Write short answer (**any four** out of six) : (4×5=20)
- a) Juxta -Glomerular Apparatus.
 - b) Abnormal constituents of urine.
 - c) Muscle Fatigue.
 - d) Anoxia.
 - e) Nervous control of respiration.
 - f) Skin-Functions.

4. Long answer question (**any two** out of four) : (2×10=20)
- a) Explain Leucocytes in detail.
 - b) Explain-Regulation of Heart rate.
 - c) Explain Mechanism of Respiration.
 - d) Explain concept of regulation of body temperature.

Long answer question (**any one** from Q. No. 5, 6 and 7)

5. Long answer question : (1×20=20)
Explain- mechanism of coagulation of blood.
6. Long answer question : (1×20=20)
Write concept of oxygen transport with Oxygen haemoglobin dissociation curve.
7. Long answer question : (1×20=20)
Write concept of Micturation Reflex with regulation.
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First B.H.M.S. (New/2015) Examination, Winter 2017
PHYSIOLOGY INCLUDING BIOCHEMISTRY – II

Total Duration : 3 Hours

Total Marks : 100

- 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.

1. Write short answer (any ten out of fifteen) : (10x2=20)

- a) Disorders of thyroid gland. /
- b) Hormones secreted by pancreas. /
- c) Hormones secreted by adrenal cortex. /
- d) Two functions of sertoli cells. /
- e) Name the enzymes in gastric juice. /
- f) Functions of vitamin E. /
- g) Two functions of oestrogen. /
- h) Define digestion. /
- i) Deficiency of vitamin B₆.
- j) What is menarche ? /
- k) Two functions of pancreatic juice. /
- l) Two functions of vitamin D. /
- m) What is spermatogenesis ? /
- n) Two fuctions of insulin.
- o) Sources of vitamin A. /

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2. Write short answer (**any four** out of six) :

(4x5=20)

- a) Digestion and absorption of lipids.
- ~~b) Basal metabolic rate.~~
- ~~c) Thyrotoxicosis.~~
- ~~d) Action of growth hormone.~~
- e) Functions of proteins.
- ~~f) Metabolism of carbohydrate.~~

3. Write short answer (**any four** out of six) :

(4x5=20)

- ~~a) Importance of balance diet.~~
- ~~b) Sources, daily requirement and deficiency diseases of Vitamin A.~~
- c) Functions of FSH.
- ~~d) Stages of spermatogenesis.~~
- ~~e) Deficiency diseases of vitamin B₁.~~
- f) Protein energy malnutrition.

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

(2x10=20)

- ~~a) Describe the hormones secreted by thyroid gland in detail.~~
- ~~b) Describe the composition, function and mechanism of secretion of saliva.~~
- c) Describe phases of menstrual cycle and role of hormones in menstrual cycle.
- d) Describe origin course and function of corticospinal tract.

Long answer question (**any one** from Q. No. 5, 6 and 7)

Long answer question :

~~5. What are hormones and describe anterior pituitary hormones in detail.~~

(1x20=20)

Long answer question :

6. Write in detail digestion and absorption of protein.

(1x20=20)

Long answer question :

7. Describe the mechanism of taste receptor along with its function.

(1x20=20)