

**FIRST B.H.M.S. (2015) (New) Examination, Summer  
(Phase - III : All Other Remaining UG/PG Courses) - 2020**

**PHYSIOLOGY INCLUDING BIOCHEMISTRY - I  
(BHMS - 2015 Syllabus is applicable to BHMS (New) Students)**

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 Erythropoiesis.
- b) Give 4 functions of blood.
- c) Give the normal value of platelets.
- d) Give normal pulse rate.
- e) What is S.A. Node?
- f) What is cynosis?
- g) What are A. V. valves?
- h) What is Tidal volume?

- i) What is GFR?
- j) Name the glands of the skin.
- k) Define Osmosis.
- l) What is Epidermis?
- m) What is Diffusion?
- n) What is Thermotaxis?
- o) What is juxtaglomerular apparatus?

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

[4 × 5 = 20]

- a) Anaemia: Definition & different types.
- b) Electrocardiogram.
- c) Properties of Cardiac muscle.
- d) Circulation & functions of lymph.
- e) Functions of R.E. System.
- f) Plasma proteins.

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

[4 × 5 = 20]

- a) Juxtaglomerular Apparatus.
- b) Lung Volume & Capacities.
- c) Write in short about Renal circulation.
- d) Hering - Breuer Reflexes.
- e) Structure of skin.
- f) Functions of muscular tissue.

4. Long answer question (**any two** out of four): **[2 × 10 = 20]**
- a) Write in detail about structure of Haemoglobin & its physiological importance.
  - b) Write in detail about Regulation of Blood Pressure.
  - c) Discuss the Oxygen Transport in relation with respiration.
  - d) Write in detail about Thermoregulation.

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

5. Write about Leucocytes in detail. Discuss the different types of WBC & their functions in detail. **[1 × 20 = 20]**
6. Write in detail about the control of respiratory mechanism. Describe the nervous & chemical regulation. **[1 × 20 = 20]**
7. Write in detail about structure & functions of the Kidney. **[1 × 20 = 20]**





**FIRST B.H.M.S. (2015) (New) Examination, Summer**  
**(Phase - III : All Other Remaining UG/PG Courses) - 2020**  
**PHYSIOLOGY INCLUDING BIOCHEMISTRY - II**  
**(BHMS - 2015 Syllabus is applicable to BHMS (New) Students)**

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) What is myxedema?
  - b) Name the hormones secreted by pancreas.
  - c) Give two functions of ADH.
  - d) Name the salivary glands.
  - e) What are lipid digesting enzymes in pancreatic juice?
  - f) Write phases of deglutition.
  - g) What are enzymes secreted in small intestine?
  - h) What is corpus luteum?

- i) What is menarche?
- j) Define spermatogenesis.
- k) What are functions of luteinising hormone?
- l) Write symptoms of vitamin C deficiency.
- m) Define vitamin and name the fat soluble vitamins.
- n) Give two signs of vitamin D deficiency.
- o) What are sources of vitamin B1?

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

[4 × 5 = 20]

- a) Tetany.
- b) Acromegaly.
- c) Digestion of carbohydrates.
- d) Functions of bile.
- e) Classification of carbohydrates.
- f) Classification of enzymes.

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

[4 × 5 = 20]

- a) Vitamin A.
- b) Vitamin K.
- c) Placenta.
- d) Spermatogenesis.
- e) First class proteins.
- f) Constituents of balanced diet.

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

[2 × 10 = 20]

- a) Describe synthesis storage and functions of thyroid hormones.
- b) Describe the movements of small intestine.
- c) Describe ovarian cycle and its hormonal regulation.
- d) Define tract and explain pyramidal tract.

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

5. What are hormones secreted by adrenal cortex? Describe the action and functions of glucocorticoids in detail. [1 × 20 = 20]

6. Explain composition, secretion, functions and regulation of gastric juice. [1 × 20 = 20]

7. Describe rods and cones and add a note on optic pathway. [1 × 20 = 20]

