

First BHMS (2015) (New) Examination Winter - 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.
 - 7) Use a common answer book for all Sections.

1. Write short answer (any ten out of fifteen): [10 × 2 = 20]

- a) What are sites of erythropoiesis?
- b) What are types of hemoglobin?
- c) What are reticulocytes? Write normal count of reticulocytes.
- d) Enumerate any four properties of cardiac muscle.
- e) Define tachycardia and bradycardia.
- f) Define ECG
- g) What is dead space?
- h) What is hypoxia?
- i) Enumerate four functions of kidney.
- j) Write normal constituents of urine.
- k) What is normal shell and core temperature?
- l) Name the glands of the skin.
- m) What are accessory structures of skin?
- n) Define osmosis.
- o) What is co-transport?

04112A

2. Write short answer (any four out of six): [4 × 5 = 20]

- a) Composition of blood
- b) Rh factor
- c) Conduction system of heart
- d) Heart sounds.
- e) RE system
- f) Functions of spleen.

3. Write short answer (any four out of six): [4 × 5 = 20]

- a) Nephron
- b) Glomerular filtration rate
- c) Smooth muscle
- d) Artificial respiration
- e) Lung compliance
- f) Structure of skin

4. Long answer question (any two out of four): [2 × 10 = 20]

- a) Describe structure and functions of platelets. What is purpura?
- b) What is cardiac output? What are factors affecting cardiac output?
- c) Describe oxygen-hemoglobin dissociation curve with a proper diagram.
- d) Explain factors of heat gain and heat loss from body.

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

5. Discuss different types of WBCs and their functions in detail. [1 × 20 = 20]

6. What is spirometry? Describe the pulmonary volumes and capacities with the help of a proper diagram. [1 × 20 = 20]

7. Discuss the mechanism of micturition. Add a note on applied physiology of micturition. [1 × 20 = 20]



First B.H.M.S. (New) (2015) Examination Winter - 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.*
 - 7) Use a common answer book for all sections.

1. Write short answer (**any ten** out of fifteen): [10 × 2 = 20]

- a) What is hormone?
- b) What is Gigantism?
- c) Describe two functions of ADH.
- d) What is absorption?
- e) Name the bile salt.
- f) Name two GIT hormones.
- g) What is Puberty?
- h) What is fertilization.
- I) Life span of male Gamet.
- j) What is Vitamin?
- k) What is scurvy?
- l) Sources of Vitamin B6.
- m) Daily requirement and sources of Vitamin D.
- n) Name the hormone secreted from ovary.
- o) What is Rickets.

04112B

2. Write short answer (any four out of six): [4 × 5 = 20]

- a) Hyperthyroidism.
- b) Diabetes mellitus.
- c) Regulation of secretion of pancreatic juice.
- d) Glycogenesis.
- e) Functions of amino acids.
- f) Digestion of proteins.

3. Write short answer (any four out of six): [4 × 5 = 20]

- a) Characteristics of vitamin.
- b) Describe night blindness.
- c) Ovarian cycle.
- d) Structure of Testies.
- e) What is balance diet and describe it.
- f) Advantages of Cooking.

4. Long answer question (any two out of four): [2 × 10 = 20]

- a) Describe hormones secreted by adrenal cortex and their functions.
- b) Functions and regulations of gastric juice.
- c) Define menstruation and explain ovarian cycle.
- d) Define and explain synapse.

Long answer question (any one from Q. No. 5, 6 and 7) [1 × 20 = 20]

5. Describe structure and function of posterior pituitary gland.
6. Describe composition and functions of pancreatic juice.
7. Describe mechanism of hearing.

