

04502 A

First B.H.M.S. (New) Examination Summer 2015  
PHYSIOLOGY INCLUDING BIOCHEMISTRY - I

Total Duration : Section A + B = 3 Hours

Total Marks : 100

SECTION - A/B

- 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**.

SAQ

(60)

1. Answer the following questions (**any ten** out of fifteen) :

(10×2=20)

- a) Give normal value of Clotting time and what is haemophilia ?
- b) Define ESR and what is its significance ?
- c) What is thrombocytopenic purpura ?
- d) Define tachycardia and bradycardia.
- e) Define ECG and name the different leads used in ECG.
- f) Define cardiac output and write two factors affecting cardiac output.
- g) What is Bors effect ?
- h) Define Vital capacity and its normal value.
- i) What is GFR and write its normal value.

P.T.O.



- j) Write down two important functions of Kidney.
- k) What is colour blindness and name the cells for colour vision.
- l) Define Accommodation.
- m) What is core temperature and write the normal body temperature.
- n) Name the different glands of the skin.
- o) What is diffusion and osmosis ?

2. Answer the following questions (any four out of six) :

(4×5=20)

- a) Functions of Leucocytes.
- b) Anaemia.
- c) Radial Pulse.
- d) Heart Sounds.
- e) Explain lymph nodes.
- f) Write the functions of spleen.

3. Answer the following questions (any four out of six) :

(4×5=20)

- a) Nephron.
- b) Explain mechanism of concentration of urine.
- c) Myopia.
- d) Organ of Corti.
- e) Hypoxia.
- f) Explain the layers of skin.

LAQ

(40)

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

(2×10=20)

- a) Describe ABO Blood group system in details.
- b) Define Cardiac Cycle. Explain Ventricular changes in detail.
- c) Explain neural regulation of respiration in detail.
- d) Explain the regulation of body temperature in detail.



Long answer questions (any One from Q. No. 5, 6, and 7)

(1×20=20)

5. Describe transport of respiratory gases :

- a) Transport of oxygen 5
- b) Oxygen dissociation curve 5
- c) Shift to right of the curve 5
- d) Haldane and Bohr's effect 5

6. Explain Nephron :

- a) Glomerulus 5
- b) Proximal convoluted tubule 5
- c) Loop of Henley 5
- d) Distal tubule 5

7. Explain the mechanism of vision by highlighting the following :

- a) Rods and cones 5
- b) Visual pathway 5
- c) Colour vision 5
- d) Colour blindness 5



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04502 B

First BHMS (New) Examination, Summer 2015  
PHYSIOLOGY INCLUDING BIOCHEMISTRY – II

Total Duration : Section A + B = 3 Hours

Total Marks : 100

SECTION – A & SECTION – B

- 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.~~

SECTION – A

SAQ

(60 Marks)

(10×2=20)

1. Answer the following questions (any ten out of fifteen) :

- a) Define Hormone. ✓
- b) Enlist the hormone secreted by pancreas. ✓
- c) What is goitre? ✓
- d) What is dysphagia ? What are its causes ? ✓
- e) What is defecation ?
- f) Define phosphorylation.
- g) Define refractory period. Name types.
- h) What is menarche ? At which age it occurs ? ✓
- i) Give use of enzyme in lab diagnosis.
- j) Define and classify anemia.
- k) Enumerate signs of Vitamin D deficiency. ✓
- l) What is pellagra ? Which vitamin prevents it ? ✓
- m) What are isoenzymes ? ✓
- n) What is Babinski sign ? ✓
- o) What is reflex arc ? ✓

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2. Answer the following questions (any four out of six) :

(4x5=20)

- a) Functions of thyroid hormone ✓
- b) Diabetes mellitus ✓
- c) Glucagon ✓
- d) Functions of liver ✓
- e) Glycogenesis ✓
- f) Tetanus ✓

3. Answer the following questions (any four out of six) :

(4x5=20)

- a) Vitamin C
- b) Thiamine ✓
- c) Structure of spermatozoon
- d) Co-enzymes
- e) Distribution of calories in diet
- f) Balanced diet for an adult man doing moderate work.

SECTION - B

LAQ

40

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

(2x10=20)

- a) Enumerate the corticosteroids. Describe the actions of glucocorticoids.
- b) Explain the composition, functions & regulation of secretion of Saliva.
- c) Define menstrual cycle & enumerate uterine changes during menstrual cycle.
- d) Write down the classification and properties of nerve fibers.

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

(1x20=20)

5. Describe gastric juice :

- a) Composition
- b) Functions
- c) Phases of secretion
- d) Regulation of secretion

5

5

5

5

6. Describe balanced diet :

- a) Definition and composition
- b) Factors affecting requirements of calories
- c) Ratio of carbohydrates, proteins and fats
- d) Applied physiology

5

5

5

5

7. Describe areas of brain :

- a) Areas in frontal lobe
- b) Areas in parietal lobe
- c) Areas in temporal and occipital lobe
- d) Limbic system

5

5

5

5