

First BHMS (New), Winter 2015
PHYSIOLOGY INCLUDING BIOCHEMISTRY - I

Total Duration: Section A+B = 3 Hours

Total Marks: 100

SECTION- A/B

- Instructions :**
- 1) All question are **compulsory**.
 - 2) All question carry equal marks.
 - 3) The number to the **right** indicates **full** marks.
 - 4) Draw diagrams **wherever** necessary.
 - 5) 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.
 - 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 Paper- I syllabus to Paper - II and vice versa. Students cannot claim that the Question is out of syllabus. As it is only for the placement sake, the distribution has been done.

SAQ

(60 Marks)

1. Write appropriate answers (**any ten** out of fifteen) :

(10x2=20)

- a) What is leucopenia ? ✓
- b) What is apex beat ? ✓
- c) Define cardiac cycle. ✓
- d) What is pulsus paradoxus ? ✓
- e) Define dyspnoea. ✓
- f) Define respiration. ✓
- g) Define blood volume. ✓
- h) What are the secretions of juxtaglomerular cells ? ✓
- i) The rods contain a pigment called _____ ✓
- j) What is colour blindness? ✓
- k) What is stratum spinosum? ✓
- l) Define osmosis. ✓
- m) Write the structure of Haemoglobin ✓
- n) What is hyperthermia? ✓
- o) What is conduction? ✓

P.T.O.



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

(4x5=20)

- a) Composition and function of blood.
- b) Erythrocyte sedimentation rate.
- c) Special junctional tissues of heart.
- d) Heart sound.
- e) R.E. cells.
- f) Formation of Lymph.

3
2 1/2

9.

2

1 1/2

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

(4x5=20)

- a) Micturition reflex. 2 1/2
- b) Glycosuria.
- c) Errors of refraction.
- d) Taste buds. 2 1/2
- e) Anoxia. _____
- f) Functions of skin. 3

8

LAQ

(40 Marks)

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

(2x10=20)

- a) Describe morphology, properties, variations and functions of RBC.
- b) Describe properties of cardiac muscles. ✓
- c) Explain the transport of oxygen in blood.
- d) What is normal body temperature? Explain regulation of body temperature.

4

10

6

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

(1x20=20)

5. Describe WBC in relation with :

- a) Classification and normal values 4 5
- b) Morphology 3 10 5
- c) Physiological Variations 1 5
- d) Functions 2 5

6. Describe regulation of respiration in relation with :

- a) Respiratory Centers 5
- b) Chemosensitive area 5
- c) Reflex regulation by chemicals 5
- d) Hering-breuer reflex 5

7. Describe mechanism of hearing with :

- a) Role of middle Ear 5
- b) Role of internal ear 5
- c) Auditory pathway 5
- d) Deafness 5

First BHMS (New), Winter 2015
PHYSIOLOGY INCLUDING BIOCHEMISTRY - II

Total Duration: Section A+B = 3 Hours

Total Marks: 100

SECTION- A/B

Instructions: 1) All question are compulsory.

2) All questions carry equal marks.

3) The number to the right indicates full marks.

4) Draw diagrams wherever necessary.

5) 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.

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 Paper - I syllabus to Paper - II and vice versa. Students cannot claim that the Question is out of syllabus. As it is only for the placement sake, the distribution has been done.

SAQ

(60 Marks)

(10x2=20)

1. Write appropriate answers (any ten out of fifteen) :

- a) Define Hormone & Write the Hormones of Posterior Pituitary. ✓
- b) Write the normal values of BSL. ✓
- c) Write names of Hormones of Adrenal cortex. ✓
- d) Define Digestion. ✓
- e) What is Deglutation ? ✓
- f) What are the functions of Iron in the body ? ✓
- g) What is Sarcomere ? ✓
- h) Define Spermatogenesis. ✓
- i) Write the names of Placental Hormones. ✓
- j) Write deficiency disease of Niacin. ✓
- k) Write deficiency disease of Vitamin B1 ✓
- l) Name the Fat soluble Vitamins. ✓
- m) Define Enzyme. ✓
- n) Define CSF. ✓
- o) Define Neurotransmitter. ✓

P.T.O.



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

(4x5=20)

- a) Functions of Glucocorticoids
- ~~b) Tetany~~
- ~~c) Functions of Saliva.~~
- ~~d) Movements of Small intestine~~
- ~~e) Digestion & absorption of Carbohydrates~~
- f) Contractile protein of Skeletal muscle.

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

(4x5=20)

- ~~a) Vitamin C~~
- ~~b) Vitamin B12~~
- ~~c) Functions of Oestrogen.~~
- d) Classification of Enzymes
- ~~e) Digestion & Absorption of Protein.~~
- f) Folic acid and its importance in pregnancy.

LAQ

(40 Marks)

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

(2x10=20)

- a) Describe the Hormones secreted by Thyroid gland in detail.
- b) Describe the composition, secretion, function & regulation of Pancreatic juice. ✓
- ~~c) Describe the various phases of menstrual cycle & their Hormonal regulation.~~
- d) What is Synapse? Explain the structure, Function & properties of Synapse.