

First B.H.M.S. (2015) Examination, Summer 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) Define cardiac output.
- c) Give Normal value of platelets.
- d) Give normal pulse rate.
- e) What is a.v. Node ?
- f) What is cyanosis ?
- g) What is normal Respiratory rate ?
- h) What is Tidal volumes ?
- i) Define Renal Filtrating membrane.
- j) Define micturation.
- k) Normal core body temperature and shell body temperature.
- l) Function of skin.
- m) What are the layer of Epidermis ?
- n) Function of aveloi.
- o) What is colloid ?

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

(4×5=20)

- a) Define erythrocyte.
- b) Define WBC and classification with function.
- c) What is E.C.G. ?
- d) Properties of Cardiac muscle.
- e) Define lymph with its function.
- f) Function of spleen.

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

(4×5=20)

- a) Juxta Glomerular Apparatus.
- b) Write in short about Renal circulation.
- c) Functions of muscular tissue.
- d) Lung Volume and Capacities.
- e) Artificial respirations.
- f) Function of skin.

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

(2×10=20)

- a) Write in detail about structure of Haemoglobin and its physiological importance.
- b) Write in detail about Regulation of Blood Pressure.
- c) Write in detail Transport of O₂ (Oxygen) in relation with respiration.
- d) Write in detail about Thermoregulation.

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

5. Long answer question :

(1×20=20)

Write in detail about erythropoiesis, site for it, stages of erythropoiesis, and factors affecting on it.

6. Long answer question :

(1×20=20)

Define Respiration, give its mechanism, with neural control and chemical control and its applied physiology.

7. Long answer question :

(1×20=20)

Write in detail about mechanism of urine formation with the help of ultra filtration, tubular reabsorption, tubular secretion and give its applied physiology.

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PHYSIOLOGY INCLUDING BIOCHEMISTRY – II

Total Duration : 3 Hours

Total Marks : 100

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- 1) Use **blue/black** ball point pen only.
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 - 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) What is Puberty ?
- b) Define vitamins.
- c) What is dysmenorrhoea ?
- d) Name the hormones of ovary. *secreted by the ovary.*
- e) Name two Bile Salts.
- f) Hormones secreted by testis.
- g) Functions of Oxytocine *oxytocin.*
- h) Name different types of papillae.
- i) Functions of Placenta.
- j) Name the functions of Stomach.
- k) Name the fat soluble vitamins.
- l) Applied ^{physiology} related to salivary secretion.
- m) Name the hormones of Posterior Pituitary. *hormones*
- n) Define vomiting.
- o) Name the hormones secreted by Thyroid. *hormones*

Q.1 (d) corrected as follows:-

d) Name the hormones secreted by the ovary.

P.T.O.

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

(4x5=20)

- Glycolysis
- Dwarfism
- Peristalsis
- Functions of Tongue
- Amino acids
- Function of gastrin.

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

(4x5=20)

- Obesity
- Enzymes
- Functions of Testosterone
- Formation of mature ovum
- Beri-Beri
- Rickets.

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

(2x10=20)

- Define and Describe Neurone.
- Write Composition and functions of pancreatic Juice.
- Enumerate hormones secreted by pancreas and add a note on insulin hormone.
- Describe menstrual cycle.

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

5. Long answer question.

(1x20=20)

Enumerate hormones secreted by anterior pituitary and describe in details growth hormone.

6. Long answer question.

(1x20=20)

Write the composition Functions and mechanism of secretion of gastric Juice.

7. Long answer question.

(1x20=20)

Write in details about Pathway of ^{taste} (test) with its applied physiology.

Q.No. 7 Corrected as under:-

Write in details about pathway of taste with its applied physiology.