

**Madhya Pradesh Medical Science University**  
**17P0002**

**B.P.Th. 1st Year Examination February – 2017**  
**Human Physiology**

Time : 3 Hours      Maximum Marks : 100

**Note :**

- (a) All questions are compulsory to Answer.
- (b) Draw diagrams wherever necessary.
- (c) Answer of question and sub question must be written strictly according to the serial order of question paper.

**1. Very short answer type Question (50–60 word only)     $10 \times 2 = 20$**

- A. Define blood pressure and write its normal value
- B. Define Motor Unit
- C. Define GFR (Glomerular Filtration Rate) and Write its normal value
- D. Surfactant
- E. Content of gastric juice
- F. Name the two excitable tissues
- G. Enumerate properties of skeletal muscle
- H. ADH
- I. Enumerate hormones of Anterior Pituitary
- J. Define Renal clearance

**2. Short answer type Question (250–300 word only)     $10 \times 5 = 50$**

- A. Erythropoiesis
- B. Neuromuscular Junction
- C. Action potential in a nerve
- D. Short term regulation of blood pressure
- E. Cardiovascular and Respiratory changes during exercise

**3. Essay Types Question (Any Two) (450–500 word only)     $15 \times 2 = 30$**

- A. Excitation Contraction coupling in skeletal muscle
- B. Nervous and chemical control of Breathing
- C. Cardiac Output and factors affecting it

**B.P.T.H. 1st Year Supplementary Examination January – 2018**  
**HUMAN PHYSIOLOGY**

Time : 3 Hours      Maximum Marks : 100

**Note :**

- (a) All questions are compulsory to answer.
- (b) Draw diagrams wherever necessary.
- (c) Answer of question and sub question must be written strictly according to the serial order of question paper.

**Q. No. 1 Very short answer the question (50–60 words)  $2 \times 10 = 20$**

- a. Define sarcomere. Write normal length of sarcomere.
- b. Define homeostasis. Give two examples of homeostasis.
- c. Name different organelles of a cell.
- d. Write composition of blood.
- e. Define synapse. Write types of synapses.
- f. Define receptors. Give examples of receptors.
- g. Write functions of liver.
- h. Define cardiac output. Write its normal value.
- i. What is Tidal Volume? Write its normal range.
- j. Hormones of Adrenal Gland.

**Q. No. 2 Short Answer the question (250–500 words)  $10 \times 5 = 50$**

- a. Wallerian Degeneration
- b. Intrinsic Mechanism of blood coagulation
- c. Cell Mediated Immunity
- d. Functions of Cerebellum
- e. How oxygen is transported in body

**Q. No. 3 Essay type question any two (450–500 words)  $15 \times 2 = 30$**

- a. Describe mechanism of skeletal muscle contraction.
- b. Name hormones of thyroid gland. Describe physiological actions of hormones of thyroid gland.
- c. Structures and properties of cardiac muscle.

**MP Medical Science University, Jabalpur**  
**Paper Code : 17BP0000101721**

**B.P.Th. 1st Year Main Examination April – 2018**  
**HUMAN PHYSIOLOGY**

Time : 3 Hours      Maximum Marks : 100

**Note :**

- (a) All questions are compulsory to answer.
- (b) Draw diagrams wherever necessary.
- (c) Answer of question and sub question must be written strictly according to the serial order of question paper.

**Q. No. 1 Very short answer the question (50–60 words)  $2 \times 10 = 20$**

- a. Define active transport. Give examples of Active Transport.
- b. Functions of blood.
- c. Enumerate blood clotting factors.
- d. Myopia & Hypermetropia.
- e. Write Enzymes present in Pancreatic juice.
- f. Define EDEMA.
- g. Define Apnoea and Hypoxia.
- h. Oxygen debt.
- i. Surfactant.
- j. Define Contraception. Give examples.

**Q. No. 2 Short Answer the question (250–300 words)  $10 \times 5 = 50$**

- a. Micturition
- b. Coronary Circulation
- c. Define Blood Pressure. Explain Short term regulation of blood pressure.
- d. Corticospinal Tract
- e. Vestibular Apparatus

**Q. No. 3 Essay type question – Any Two (450–500 words)  $15 \times 2 = 30$**

- a. Explain mechanism of Smooth Muscle Contraction.
- b. Describe impulse transmission at Neuromuscular Junction. Add a note on Myasthenia Gravis.
- c. Chemical Control of Respiration.

**Madhya Pradesh Medical Science University, Jabalpur**  
**B.P.Th. 1st Year Supplementary Examination August – 2018**  
**Paper Code : 18BP0000101721**  
**HUMAN PHYSIOLOGY**

Time : 3 Hours      Maximum Marks : 100

**Note :**

- (a) All questions are compulsory to answer.
- (b) Draw diagrams wherever necessary.
- (c) Answer of question and sub question must be written strictly according to the serial order of question paper.

**Q. No. 1 Very short answer the question (50–60 words)  $2 \times 10 = 20$**

- a. Define Homeostasis & give examples of homeostasis
- b. Enumerate different types of white blood cells
- c. Enumerate different valves of heart
- d. Isometric and isotonic muscle contraction
- e. Write function of Saliva
- f. Define muscle tone
- g. Define total lung capacity and residual volume
- h. Define basal metabolic rate
- i. Peristalsis
- j. Enumerate hormones released from adrenal cortex

**Q. No. 2 Short Answer the question (250–300 words)  $10 \times 5 = 50$**

- a. Blood group
- b. Oxygen transport in blood
- c. Define blood pressure. Explain the role of renin angiotensin system in blood pressure regulation
- d. Wallerian degeneration
- e. Muscle spindle

**Q. No. 3 Essay type question (450–500 words)  $15 \times 2 = 30$**

- a. Explain mechanism of generation of action potential in a neuron
- b. Describe different phases of cardiac cycle
- c. Describe spermatogenesis. Write the changes occurring at puberty in human male & female

**Madhya Pradesh Medical Science University, Jabalpur**  
**B.P.Th. 1st Year Main Examination January – 2019**  
**Paper Code : 19AP000016721**  
**Human Physiology**

Time : 3 Hours      Maximum Marks : 100

**Note :**

- (a) All questions are compulsory to answer.
- (b) Draw diagrams wherever necessary.
- (c) Answer of question and sub question must be written strictly according to the serial order of question paper.

**Q.1 Very short answer the question (50–60 words)     $02 \times 10 = 20$**

- a. Phagocytosis
- b. B-lymphocytes
- c. Name different waves of ECG write normal duration of J wave & QRS complex
- d. Respiratory membrane
- e. Enumerate muscle proteins
- f. Growth hormone
- g. Bilirubin
- h. Antidiuretic hormone
- i. Stroke volume & ejection fraction
- j. Define withdrawal reflex and stretch reflex, give example of each

**Q.2 Short Answer the question (250–300 words)     $05 \times 10 = 50$**

- a. Degenerative & regenerative changes after nerve injury
- b. Explain Frank Starling law in regulation of cardiac output
- c. Myoglobin
- d. Thyroid hormone
- e. Haemoglobin and its functions

**Q.3 Describe in details (450–500 words)     $02 \times 15 = 30$**

- a. Describe the mechanism of skeletal muscle contraction
- b. Describe the mechanism of blood coagulation

**Madhya Pradesh Medical Science University, Jabalpur**  
**B.P.T.H. 1st Year Main Examination January – 2020**  
**Paper Code : 20AP0000101721**  
**Subject : Human Physiology**

Time : 3 Hours      Maximum Marks : 100

**Note :**

- (a) All questions are compulsory to answer.
- (b) Draw diagrams wherever necessary.
- (c) Answer of question and sub question must be written strictly according to the serial order of question paper.

**Q1. Very short answer the question (50–60 words)     $02 \times 10 = 20$**

- a. Sick sinus syndrome
- b. Homeostasis
- c. Sarcomere
- d. Haemoglobin and its type
- e. GFR
- f. Diabetes Mellitus
- g. Hormones of posterior pituitary gland
- h. Refractory errors
- i. Endocochlear potential
- j. Seminal fluid

**Q2. Short Answer the question (250–300 words)     $10 \times 05 = 50$**

- a. Describe pathway for blood coagulation
- b. Mechanism of HCl secretion and its regulation
- c. Describe functions of basal ganglia and comment on chorea
- d. Neural regulation of respiration
- e. Counter current multiplier

**Q3. Describe in details (450–500 words)     $15 \times 02 = 30$**

- a. Define shock, types of shock and its stages
- b. Describe functions of glucocorticoids