

Sep 2017

BLDE UNIVERSITY
MBBS PHASE - I EXAMINATION

[Time: 3 Hours]

[Max.Marks : 100]

PHYSIOLOGY – PAPER - I
QP CODE: 1023

Your answer should be specific to the questions asked.

Draw neat labeled diagrams wherever necessary.

Each answer should be written on new page only.

Write Question No. in left side of margin.

Long Essay: (Answers to be started on fresh page only)

2x10=20

1. Describe the coagulation process in detail. Add a note on the tests for coagulation.
2. Describe in detail the neural regulation of respiration.

Short Essay: (Answers to be started on fresh page only)

10x5=50

3. Body fluid compartment.
4. Na⁺- K⁺ pump
5. Coronary blood flow
6. Mechanism of secretion of HCl in stomach
7. Rh factor
8. Describe cardiovascular changes during muscular exercise
9. Propagation of nerve impulse
10. Describe the mechanism of secretion of pancreatic juice
11. Describe the nerve supply of urinary bladder
12. Intrapleural and Intra alveolar pressure changes during a normal respiratory cycle

Short Answers: (Leave three lines gap between the answers)

10x3=30

13. Draw and label ventricular action potential
14. Alveolo capillary Membrane
15. Functions of plasma proteins
16. Deglutition reflex
17. Enumerate the peculiarities of renal blood flow
18. Gibbs Donnan membrane equilibrium
19. Sarcomere
20. Windkessel's effect
21. Periodic breathing
22. Cystometrogram

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PHYSIOLOGY – PAPER - I

QP CODE: 1013

Your answer should be specific to the questions asked.

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Write Question No. in left side of margin.

Long Essay: (Answers to be started on fresh page only)

2x10=20

1. Define blood pressure. Mention the normal values of components of BP. Describe the mechanisms of regulation of BP.
2. Name the muscles of respiration. Describe the mechanics of breathing.

Short Essay: (Answers to be started on fresh page only)

10x5=50

3. Functions of plasma proteins.
4. Chemical regulation of respiration.
5. Describe the process of renal reabsorption of Na⁺.
6. Entero hepatic circulation of bile salts.
7. Describe mechanisms by which CO₂ is transported in blood. Add a note on Haldane's effect.
8. Describe the movements of small intestine.
9. Active transport mechanism.
10. Draw a neat and labeled diagram of action potential and explain its ionic basis.
11. Define circulatory shock. Describe the features present as a compensatory mechanism in hypovolemic shock.
12. Describe the components and functions of Juxta glomerular apparatus.

Short Answers: (Leave three lines gap between the answers)

10x3=30

13. Compare and contrast Osmotic and Pressure diuresis.
14. List the causes for AV nodal delay. Mention its significance.
15. Define and classify hypoxia.
16. Laboratory classification of anemia.
17. Explain the significance of the sham feeding experiment.
18. Define dead space volume. Mention the effect of increase in dead space volume on alveolar ventilation.
19. List the functions of macrophages.
20. Draw a neat and labeled diagram of ECG.
21. Define GFR. Mention its normal value.
22. Mention the sources and functions of (a) Gastrin (b) CCK – PZ (c) Secretin.

8ep 2017

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MBBS PHASE - I EXAMINATION

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[Max.Marks : 100]

PHYSIOLOGY – PAPER - II

QP CODE: 1014

Your answer should be specific to the questions asked.

Draw neat labeled diagrams wherever necessary.

Each answer should be written on new page only.

Write Question No. in left side of margin.

Long Essay: (Answers to be started on fresh page only)

2x10=20

1. List the ascending tracts. Describe the pathway that carries pain sensation with the help of a neat and labeled diagram.
2. Describe the functions and regulation of secretion of glucocorticoids. Explain the clinical features of Cushing's syndrome.

Short Essay: (Answers to be started on fresh page only)

10x5=50

3. Define colour vision. Describe one of the theories of colour vision.
4. Describe the role of hormones in calcium homeostasis.
5. Draw a neat and labeled diagram of organ of corti. Explain the role of hair cells in hearing.
6. Draw a neat and labeled diagram of taste pathway. Give reasons for loss of taste sensation in severe iron deficiency anemia.
7. Describe neuro endocrine reflex with an example.
8. Explain synaptic inhibition with the help of diagram.
9. Reciprocal Innervation.
10. Describe the functions of thyroid hormone.
11. Draw a neat and labeled diagram of neuromuscular junction. Explain the cause and features of myasthenia gravis.
12. Describe spermatogenesis. Explain the factors influencing it.

Short Answers: (Leave three lines gap between the answers)

10x3=30

13. Define the following terms: menarche, menopause and amenorrhoea.
14. Mention cause and features of Parkinson's disease
15. Draw a neat and labeled diagram of sarcomere. Name the muscle proteins involved in skeletal muscle contraction.
16. Name the photoreceptors and their location.
17. List the hormones secreted by placenta.
18. Mention the cause and features of gigantism.
19. List the changes seen in accommodation reflex.
20. List the features of cerebellar dysfunction.
21. Name the EEG waves and mention the stages of sleep in which each of these waves are recorded.
22. Define ovulation. Explain one test to detect it.

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PHYSIOLOGY – PAPER - II
QP CODE: 1024

Your answer should be specific to the questions asked.

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Each answer should be written on new page only.

Write Question No. in left side of margin.

Long Essay: (Answers to be started on fresh page only)

2x10=20

1. Explain the origin, course, termination and functions of corticospinal tract. Add a note on effects of its lesion in right internal capsule
2. Name the factors affecting plasma Ca^{2+} concentration? Describe the biosynthesis, actions and metabolism of parathyroid hormone. What are the signs and symptoms of hyperparathyroidism?

Short Essay: (Answers to be started on fresh page only)

10x5=50

3. Parkinsonism
4. Functions of limbic system
5. Impedance Matching
6. Neuronal circuit of Cerebellum
7. Visual Pathway
8. Actions and regulation of Insulin
9. Properties of sensory receptors.
10. Gustatory pathway
11. Refractive media of eye
12. Physiological changes during pregnancy

Short Answers: (Leave three lines gap between the answers)

10x3=30

13. List the functions of hypothalamus
14. Visceral Pain.
15. Binocular vision
16. LH Surge
17. Spinal shock.
18. Capacitation of Spermatozoa
19. Synaptic Inhibition
20. Cardio vascular actions of adrenaline
21. Actin and Myosin Filaments
22. Nerve Action Potential.