

April - 2023 1st 70/5h

**BLDE (DEEMED TO BE UNIVERSITY)
MBBS PHASE – I EXAMINATION**

[Time: 3 Hours]

[Max. Marks: 80]

PHYSIOLOGY – PAPER – I

QP CODE: 1013

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 number in left side of margin

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

2 X 10 = 20

1. A middle aged patient complained of chest pain on exertion, which radiates to the medial side of left shoulder. ECG taken during rest was found to be normal. Patient gets instant relief on taking isosorbide dinitrate
 - a. What is the diagnosis?
 - b. Explain the cause for concerned features
 - c. Discuss the regulation of coronary blood flow (2+3+5)
2. Mr Chidanad, a 45 year male complained of repeated pain in the abdomen used to get increased after intake of food. During the initial phase of illness, it used to get relieved after vomiting /taking antacids. Now, for all these medications no response. As patient was suffering from multiple joint pains, he has been put on nonsteroidal anti-inflammatory drugs.
 - a. Diagnose the condition
 - b. Mention the physiological basis of treatment
 - c. Discuss the mechanism of secretion of gastric hydrochloric acid (1+3+6)

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

6 X 5 = 30

3. Cell mediated immunity
4. Rh Factor
5. Define cardiac output & discuss factors influencing it
6. Left ventricular pressure changes during cardiac cycle
7. Intrapleural & intraalveolar pressure changes during normal & quiet breathing
8. Renal tubular handling of Na⁺

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

10 X 3 = 30

9. List the differences between diffusion & osmosis with examples
10. Mention the functions of a. Endoplasmic reticulum b. Lysosomes
11. Peristalsis: Definition, Types & Site of occurrence
12. Einthoven triangle
13. List the non-respiratory functions of lungs
14. Define the following & give normal values of a. FEV₁ b. Respiratory Minute Volume
15. Draw a neat & labeled graph showing relationship between partial pressure of Oxygen & saturation of hemoglobin with oxygen
16. Define the following a. Dyspnea b. Cyanosis c. Hypoxia
17. List the differences between facultative & obligatory renal reabsorption of water
18. List the roles of a Physician

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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 number in left side of margin

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

2 X 10 = 20

1. Mr. Ramesh 24 year old individual met with road traffic accident. He sustained spinal cord injury and got admitted to trauma unit .The Physical examination and X ray report suggested that there was an incomplete and diffuse bilateral damage to spinal cord at C5 segment .A physical examination on 5th day revealed normal vital signs but loss of sensations in arms, upper trunk with marked spasms and exaggerated stretch reflexes of lower limbs. Patient also had urinary incontinence.
 - a. What is the diagnosis
 - b. Explain the reason for exaggerated deep reflexes on 5th day of injury?
 - c. Why did the patient suffer from urinary incontinence? (2+5+3)
2. Explain the steps in the synthesis Thyroid hormones. Describe the regulation of Thyroid hormones secretion and its clinical importance? (3+4+3)

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

6 X 5 = 30

3. Enumerate the functions of testosterone.
4. Describe the role of hormones in the development of secondary sexual characteristics in female.
5. Describe cardio-respiratory, metabolic adjustments during exercise
6. What is pyrexia. Explain physiological basis of its genesis?
7. What is referred pain? Explain two theories of referred pain
8. Explain the role of hypothalamus in regulating hunger and satiety.

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

10 X 3 = 30

9. Define the following a. Binocular vision b. Blind spot c. Stereopsis
10. List the differences between EPSP and IPSP
11. List the features of Parkinsonism
12. Name age related changes in cardiovascular system
13. Draw the taste sensation pathway .mention its abnormalities.
14. What is REM sleep?
15. Draw neat and labelled diagram to show different refractive errors of eye.
16. List the clinical features seen in a) Acromegaly b) Cretinism
17. Athletes have comparatively low hear rate. Give reason?
18. Tetany : Definition, Types and Features