OCH-2024

[Max. Marks: 80]

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

[Time: 3 Hours]

#### PHYSIOLOGY - PAPER - I **OP 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 the middle of the page

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

- 1. What is cardiac cycle? With the help of a neat & labeled diagram, discuss various volume & pressure changes that occur in left ventricle (2+8)
- 2. With the help of a neat & labeled diagram of organization of respiratory neurons in the brain, discuss neural regulation of respiration. Add a note on effects of sections at various levels of brain on respiration

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

- 3. Mr Shankar, an 84 year-old, is accompanied to the clinic by his son. Mr. Shankar stated that for the past year he has felt dizzy when he stands up after lying down and often needs to "catch himself" on furniture or walls shortly after standing. His dizziness is intermittent but happens several times per week. The blood pressure recording reveals Supine-136/76 mm Hg, Standing-114/76 mm Hg.
  - a. What is the diagnosis?

b. Describe the BP regulatory mechanisms that are activated immediately on assuming an erect position from lying down posture. (1+4)

- 4. Describe the professional qualities of a physician
- 5. A middle aged woman complains of bleeding gums. On investigation, blood report is as follows: i. Clotting time-5 minutes
  - ii. Bleeding time-20 minutes
  - iii. Platelet count-40,000/mm<sup>2</sup>
  - a. What is the diagnosis?
  - b. What is the mode of treatment?
  - c. Discuss the morphology of concerned blood cell.
- 6. Erythropoiesis: Definition & factors influencing it
- 7. JG Apparatus: Diagram, Description & Significance
- 8. Mechanism of secretion of gastric hydrochloric acid

**P.T.O** 

 $2 \ge 10 = 20$ 

 $6 \ge 5 = 30$ 

(2+5+3)

(1+1+3)

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

 $10 \ge 3 = 30$ 

- 9. Draw a neat labeled diagram of electron microscopic structure of cell membrane
- 10. Define the following terms a. Homeostasis b. Apoptosis
- Define the following terms & give normal values a. Cardiac Index b. End Diastolic Volume c. End Systolic Volume
- 12. Define the following terms a. Hypoxia b. Asphyxia c. Dysbarism
- 13. Draw a neat & labeled diagram of alveolo-capillary membrane
- 14. Define the following a. Bohr's Effect b. Haldane's effect
- 15. List the functions of saliva
- 16. What are Choleretics & Cholegogues. Give suitable examples for each
- 17. Draw a neat & labeled diagram of cystometrogram
- 18. List the roles of an Indian medical graduate

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[Max. Marks: 80]

 $2 \times 10 = 20$ 

(1+3+6)

 $6 \ge 5 = 30$ 

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

[Time: 3 Hours]

### 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 the middle of the page

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

 A women aged 36 had a complaint of weight-gain, fatigue, weakness, joint and muscle pain, cold intolerance, constipation and amenorrhea since 3months. On examination she had comprehension mental sluggish, decreased alertness

a. Name the condition

b. Mention the hormones secreted by thyroid gland.

c. Describe the functions & regulation of secretion of the thyroid gland.

2. Define neuromuscular junction. Explain the steps in transmission of neuro muscular junction. Add a note on Myasthenia gravis?

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

- 3. Blood brain Barrier: Definition, Diagram and Significance
- 4. What is Wallerian degeneration? Describe the changes that happen in the distal segment of axon section
- 5. A Person is suddenly exposed to very cold environment. Explain the body mechanisms in him.
- 6. Describe the changes in the endometrium and ovaries involved in menstrual cycle highlighting the role of hormones.
- 7. Describe physiological effects of moderate physical training on cardiorespiratory system.
- 8. Give reason for a) Hyper pigmentation seen in Addison's disease b) Hyperglycemia is observed in Cushing's disease

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

- 9. Describe the functions of Sertoli cells
- 10. List the differences between rigidity and spasticity
- 11. What is neuroendocrine reflex and its significance?
- 12. Blood brain Barrier: Definition, Diagram and Significance

**P.T.O** 

10 X 3 = 30

- 13. What is rigor mortis?
- 14. Enlist Features of Parkinsonism.
- 15. What are the functions of limbic system?
- 16. Deafness: Definition, Types and tests to detect
- 17. Define and give significance of a. Stereognosis b. Adiadochokinesia.
- 18. Define and mention the corrections of the following a. Astigmatism b. Presbyopia

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