REV-01
BMLT/78/39/44

2025/05

SET A

BACHELOR OF MEDICAL LABORATORY TECHNOLOGY
SECOND SEMESTER
PHYSIOLOGY II
BMLT – 202

[USE OMR SHEET FOR OBJECTIVE PART]

Duration: 3 hrs. **Full Marks: 70**

(Objective)

Time: 30 min. **Marks: 20**

Choose the correct answer from the following: ***1×20=20***

1. Which of the following is the best definition of physiology?
   a. The microscopic study of tissues and cells
   b. The study of how the body works.
   c. All the chemical processes that take place in the organelles of the body's cells
   d. The body's automatic tendency to maintain a relatively constant internal environment

2. One of the following is NOT a serous membrane. Which one?
   a. pleura
   b. peritoneum
   c. mucosa
   d. Pericardium

3. The vitreous:
   a. is firmly attached to the pars plana
   b. has a high concentration of hyaluronic acid
   c. contains calcium in asteroid hyaloids
   d. all above

4. Which of these is an accessory reproductive gland in male mammal?
   a. Inguinal gland
   b. Prostate gland
   c. Mushroom-shaped gland
   d. Gastric gland

5. What is the full form of PCT?
   a. Proximal Coronary Tube
   b. Proximal Convoluted Tubule
   c. Proximal Carotid Tube
   d. Part Covering Thymus

6. Which of the following is the function of cones in the eye?
   a. Secretion and balances
   b. Vision in darkness
   c. Monocular vision
   d. Vision in the high beam light and colour differentiation

7. Which of the following prevents the backflow of urine?
   a. Valves
   b. Muscles
   c. Urinary sphincter
   d. Oblique opening of ureters

8. The process of taking dissolved material into the substance of the cell is called.
   a. Phagocytosis
   b. Pinocytosis
   c. absorption
   d. Diffusion

9. Ig G:
   a. Has a molecular weight of 150000 Dalton
   b. Is the principal immunoglobulin in secondary immune response
   c. Are the most common circulating immunoglobulins in the serum
   d. all above

10. The following are true:
   a. Ig G crosses the placenta
   b. Thymus gland is responsible for cellular immunity
   c. C1-9 is used by the alternative complement pathway
   d. None of the above

11. The following structures are of ectodermal origin:
   a. the retina and its retinal pigment epithelium
   b. iris stroma
   c. the sclera
   d. the ciliary muscle

12. The effect of sympathetic nervous system include:
   a. reduced gastrointestinal motility
   b. pupillary dilatation
   c. Both a and b
   d. None

13. Anti-diuretic diuretic hormone (ADH)
   a. is synthesized by the posterior lobe of the pituitary gland
   b. is released by neurosecretion
   c. its secretion is increased by a low plasma osmolarity
   d. increases the permeability of the distal convoluted tubule

14. Adrenaline:
   a. increases coronary blood flow
   b. increases free fatty acids in the blood
   c. mobilizes glycogen stores from the liver
   d. All of the above

15. Which of the following are parts of the human respiratory system?
   a. Trachea
   b. Diaphragm
   c. The lungs
   d. All of the above

16. Loss of water from tissues is called a.
   a. hypotension
   b. none of them
   c. dehydration
   d. edema

17. Neuron excitability increases in
   a. alkalosis
   b. acidosis
   c. neutral
   d. none of them

18. The major integrator of autonomic nervous system is
   a. cerebrum
   b. cerebellum
   c. hypothalamus
   d. All

19. If useful products are released from the cell. The process is called
    a. secretion
    b. excretion
    c. sweating
    d. Urination

20. Immunity depends on which constituent as antibodies
    a. carbohydrates
    b. Proteins
    c. lipid
    d. Fats

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Descriptive

Time : 2 hrs. 30 min. Marks : 50

[Answer question no.1 & any four (4) from the rest]

1. Describe the structure and function of the organs of thefemale reproductive system? 10

2. How is the formation of urine regulated? Describe the hormonal changes that occur during the ovarian and menstrual cycles. 10

3. Write the location and description of pituitary gland, Draw the diagram of endocrine glands? 10

4. Draw and describe organ for Opthalmoception. Write a brief essay on vestibular system? 10

5. Describe different type endocrine disorders? 10

6. Describe Secondary Lymphaticorgans and their role in active immune responses? 10

7. Mention structure and function of brain with diagram? 10

8. What are the different types of antigens? Discuss about the antigen presenting cells? 10

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