

**BACHELOR OF MEDICAL LABORATORY TECHNOLOGY**  
**SECOND SEMESTER**  
**PHYSIOLOGY - II**  
**BMLT - 202**

(USE SEPARATE ANSWER SCRIPTS FOR OBJECTIVE & DESCRIPTIVE)

Duration: 3 hrs.

Full Marks: 70

[ PART-A: Objective ]

Time: 20 min.

Marks: 20

*Choose the correct answer from the following:*

*1×20=20*

1. Functional Unit of kidney
  - a. Bowmans Capsule
  - b. Neuron
  - c. Nephron
  - d. None of the above
2. Every minute.....ml/min of blood flows through kidney.
  - a. 1250
  - b. 1300
  - c. 1550
  - d. 1200
3. Cystinuria leads to
  - a. Kidney stones
  - b. Gall stones
  - c. Gout
  - d. mental retardation
4. Only human tissue that can be transplanted without fear of rejection.
  - a. Scler
  - b. Pupi
  - c. Iris
  - d. Corne
5. Sweet Odour in Urine is a indication of
  - a. Insomnia
  - b. Hyperglycemia
  - c. Hypoglycemia
  - d. All of the above
6. Rhodopsin is composed of
  - a. Opsin
  - b. Retinal
  - c. Opsin+Retinal
  - d. None of the above
7. Colour-blindness is a ..... disease
  - a. Inherited
  - b. Chronic
  - c. acute
  - d. None of the above
8. Cones respond best in
  - a. bright light
  - b. dim light
  - c. normal light
  - d. All of the above
9. Myopia
  - a. Near-sightedness
  - b. Normal sight
  - c. farsightedness
  - d. ) None of the above
10. Otoliths are
  - a. tiny stones
  - b. Mucus secretion
  - c. Tears
  - d. None of the above

11. Endocrine glands are called ..... glands
  - a. duct
  - b. ductless
  - c. target
  - d. None of the above
12. Pars intermedia secretes
  - a. MSH
  - b. LH
  - c. TSH
  - d. None of the above
13. Pituitary gland is divided into
  - a. Adenohypophysis
  - b. Neurohypophysis
  - c. both a & b
  - d. None of the above
14. Prolonged hyperglycaemia leads to a complex disorder called
  - a. ) Diabetes mellitus
  - b. Diabetes insipidus
  - c. Hypothyroidism
  - d. None of the above
15. Ovary produces the two steroid hormones called
  - a. Estrogen and
  - b. Progesterone
  - c. Both a & b
  - d. None of the above
16. B lymphocytes produce .....
  - a. antibodies
  - b. Antigen
  - c. enzymes
  - d. All of the above
17. T cells also get their name from the site of maturation, i.e. ....
  - a. thymus
  - b. bursa of Fabricius.
  - c. Major Histocompatibility Complex(MHC)
  - d. None of the above
18. Mitosis is called.....
  - a. Equational Division
  - b. Reduction Division
  - c. Both a & b
  - d. None of the above
19. T lymphocytes differentiate into two main subtypes
  - a. T helper (T<sub>H</sub>) cells-
  - b. T cytotoxic (T<sub>C</sub>) cells
  - c. Both a&b
  - d. NK cells
20. The B cells are responsible for .....
  - a. humoral immunity
  - b. cell-mediated immunity
  - c. autoimmunity
  - d. None of the above

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( Part-B : Descriptive )

Time : 2 hrs. 40 min.

Marks: 50

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

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|---|--------|
| 1. Explain in details about Pituitary gland.  | 10     |
| 2. a) Describe the functions of Local chemicals secreted by Kidney.<br>b) What are the Physical Characteristics to be examined during analysis of a Urine sample? | 5+5=10 |
| 3. a) What are the functions of Pineal Gland?<br>b) What are the hormones secreted by Male and Female reproductive Organs? Describe briefly.                      | 5+5=10 |
| 4. What are the process through which Urine formation occurs in Nephron?  | 10     |
| 5. What are the accessory structures of eye? Describe briefly about the structures.   | 10     |
| 6. On the basis of structure and function describe the types of lymphocytes in details.   | 10     |
| 7. Describe types of Immunity in details.   | 10     |
| 8. a) Describe the functions of Rods and Cones<br>b) What is Macular Degeneration?  | 5+5=10 |

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