

**BACHELOR OF MEDICAL LABORATORY  
TECHNOLOGY  
FIFTH SEMESTER  
BIOCHEMISTRY V  
BMLT – 503 [SPECIAL REPEAT]  
[USE OMR SHEET FOR OBJECTIVE PART]**

Duration: 3 hrs.

Full Marks: 70

Time: 30 min.

**( Objective )**

Marks: 20

*Choose the correct answer from the following:*

**1×20=20**

- Which test measure the glomerular filtration of the kidney
  - Blood urea nitrogen.
  - Serum total Protein test.
  - Serum cholesterol.
  - Urea clearance test
- \_\_\_\_\_ is a measure of the total concentration of dissolved particles in the specimen
  - Prostaglandins
  - Renin
  - Specific gravity
  - Osmolarity
- Which test determine acid-base status of kidney function
  - Serum creatinine
  - Serum urea
  - Serum electrolytes
  - Creatinine clearance test
- Which test is excluded from the cardiac injury panel tests.
  - CPK
  - SGOT
  - SGPT
  - LDH
- Which of the following creatine kinase is a marker for myocardial infarction.
  - CK- MM
  - CK - MB
  - CK- BB
  - CK- MI
- In liver and skeletal muscles which isoenzymes of LDH appears or predominate
  - LD -1 and LD-2
  - LD -4 and LD-5
  - LD -1 and LD-4
  - LD -5 and LD-2
- CK-MM are found in
  - Brain and Heart muscles
  - Skeletal and Heart muscles
  - Heart muscles
  - Brain
- Reference range of ALT
  - Upto 50 U/L
  - Upto 42 U/L
  - Upto 52 U/L
  - Upto 30 U/L
- PNP full form
  - Pnitrophenyl phosphate
  - Pitrophenyl phosphate
  - Phenylene phosphate
  - Phenylalanine phosphate

10. The optimum temperature of alpha amylase
- |            |            |
|------------|------------|
| a. 58-65°C | b. 63-68°C |
| c. 68-74°C | d. 70-80°C |
11. Conjugated bilirubin pass through kidneys which excrete in urine is termed as
- |                 |                    |
|-----------------|--------------------|
| a. Stercobilin  | b. Jaundice        |
| c. Urobilinogen | d. Stercobilinogen |
12. Conjugated bilirubin pass through the guts which excrete in faeces is termed as
- |                 |                    |
|-----------------|--------------------|
| a. Urobilinogen | b. Stercobilinogen |
| c. urobilin     | d. Stercobilin     |
13. Jaundice is also known as
- |              |                 |
|--------------|-----------------|
| a. Hepatitis | b. Post hepatic |
| c. Icterus   | d. Hepatic      |
14. T3 hormone is
- |                     |                                |
|---------------------|--------------------------------|
| a. Triiodothyronine | b. Thyroxine                   |
| c. Threonine        | d. Thyroid stimulating hormone |
15. Post- hepatic jaundice is also known as
- |                   |                   |
|-------------------|-------------------|
| a. Hemolytic      | b. Obstructive    |
| c. Hepatocellular | d. Pre- Hemolytic |
16. T4 hormone is
- |                     |                                |
|---------------------|--------------------------------|
| a. Triiodothyronine | b. Thyroxine                   |
| c. Threonine        | d. Thyroid stimulating hormone |
17. Analysis in which each specimen in the batch enters the analytical process one after another
- |                        |                      |
|------------------------|----------------------|
| a. Parallel analysis   | b. Discrete analysis |
| c. Sequential analysis | d. Batch analysis    |
18. Transport of a quantity analyte from one specimen reaction in to another and contaminating a subsequent one
- |                          |               |
|--------------------------|---------------|
| a. Point of care testing | b. Carry over |
| c. Centralised testing   | d. Core lab   |
19. Which of the following plays a key role in the metabolism of thyroid gland
- |              |           |
|--------------|-----------|
| a. Sodium    | b. Iodine |
| c. Potassium | d. Copper |
20. Which one of the following links together multiple lab disciplines into a single testing platform interconnected by a track
- |                               |                                |
|-------------------------------|--------------------------------|
| a. Stand-alone systems        | b. Total laboratory automation |
| c. Modular integrated systems | d. Centralised system          |

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**( Descriptive )**

Time : 2 hrs. 30 min.

Marks : 50

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

1. Explain the Glucose Tolerance Test (GTT). 10
2. Explain the formation of urine. Describe the test to assess kidney Functions. 5+5=10
3. Discuss the diagnostic marker of myocardial infarction. Write a short note on Atherosclerosis. 5+5=10
4. Give the Classification of Thyroid Function Tests. Explain Hyperthyroidism and Hypothyroidism. 5+5=10
5. Define Jaundice. Explain the types in details. 10
6. Discuss the Classification of Amylase, procedure Write the Principle and clinical significance of ALP 5+5=10
7. Define Automation. Explain its different analytical techniques. 10
8. Write the functions of liver. Describe the Metabolism of bilirubin. Discuss the Test to assess liver function. 3+3+4  
=10

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