

BACHELOR OF MEDICAL LABORATORY TECHNOLOGY  
FIRST SEMESTER  
PATHOLOGY  
BMLT – 105  
(USE OMR SHEET FOR OBJECTIVE PART)

**SET  
B**

Duration: 3 hrs.

Full Marks: 70

Time: 30 min.

( Objective )

Marks: 20

*Choose the correct answer from the following:*

*1×20=20*

1. The Stage of a microscopic is :
  - a. Dancing place
  - b. Singing place
  - c. Speaker's place
  - d. Where object for study is placed
2. Colour of Urine is :
  - a. Red
  - b. Straw
  - c. Blue
  - d. Green
3. The Specific Gravity of Urine is :
  - a. 1.001-1.010
  - b. 1.002-1.020
  - c. 1.003-1.030
  - d. 1.04-1.040
4. In the context of the ABO blood group, a transfusion of AB blood may be given to a person who has blood type
  - a. O
  - b. AB
  - c. A
  - d. B
5. Which of the below not a method of urine collection
  - a. Catheter sample collection
  - b. Random urine sample
  - c. Mid stream urine sample
  - d. Paracentesis
6. Other name of WBC counting fluid
  - a. Hayem solution
  - b. Turk's fluid
  - c. Serous fluid
  - d. None of the above
7. AB blood group is called the :
  - a. Universal Recipient
  - b. Universal Donor
  - c. University Professor
  - d. University Controller
8. Formation of WBC is called :
  - a. Erythropoiesis
  - b. Leucopoiesis
  - c. Lymphopoiesis
  - d. Thrombopoiesis
9. Most reliable method for Hb estimation is
  - a. Sahli method
  - b. WHO colour scale
  - c. Strip method
  - d. Cyanmethemoglobin method

10. Which one is not a composition of urine?
- |            |              |
|------------|--------------|
| a. Urea    | b. Uric Acid |
| c. Ammonia | d. Sucrose   |
11. Venous blood is collected from
- |             |                     |
|-------------|---------------------|
| a. Fore arm | b. Finger Tip       |
| c. Arteries | d. All of the above |
12. Thrombopoiesis process is regulated by
- |                   |                      |
|-------------------|----------------------|
| a. Erythropoietin | b. Leucopoietin      |
| c. Thrombopoietin | d. None of the above |
13. Anticouglant use for ESR Estimation is
- |                             |                         |
|-----------------------------|-------------------------|
| a. 3.8 % Sodium Flouride    | b. 3.2 % Sodium Citrate |
| c. 3.8 % Tri Sodium Citrate | d. Heparin              |
14. Which of the below is not true about RBC
- |                               |                        |
|-------------------------------|------------------------|
| a. It's Bi-concave disc shape | b. It's nucleated cell |
| c. It transport oxygen        | d. It contain Hb chain |
15. Which one is not sign of inflammation is/are
- |          |          |
|----------|----------|
| a. Rubor | b. Calor |
| c. Tumor | d. Dolar |
16. Temp and time require for hot air oven is/are
- |                      |                     |
|----------------------|---------------------|
| a. 160°C for 2 hours | b. 170°C for 1 hour |
| c. 180°C for 30 min  | d. All of the above |
17. In Leishman stain Eosin will stain the
- |                 |                   |
|-----------------|-------------------|
| a. Nucleus      | b. Cytoplasm      |
| c. Nucleus pink | d. Cytoplasm blue |
18. Dilution factor for TLC
- |          |         |
|----------|---------|
| a. 20    | b. 1/20 |
| c. 1/200 | d. 200  |
19. In ABO System, Blood group 'O' is characterized by
- |                               |                                 |
|-------------------------------|---------------------------------|
| a. Presence of antigen O      | b. Presence of both AB antigen  |
| c. Absence of both AB antigen | d. Presence of both AB Antibody |
20. Which of the following is not example of romanowsky stain
- |                         |                 |
|-------------------------|-----------------|
| a. Leishman stain       | b. Wright stain |
| c. Methylene blue stain | d. Geimsa stain |

**( Descriptive )**

Time : 2 hrs. 30 min.

Marks : 50

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

1. Draw, label and describe different parts of the Microscope. 10
  
2. Write the principle, procedure and interpretation of Leishman staining. 10
  
3. a. Define anaemia. 2+8=10  
b. Write procedure, calculation and clinical significance of RBC count.
  
4. a. Write the principle and procedure of Sahli's method of Hb estimation. 5+5=10  
b. Write name of the 5 sign of inflammation along with their meaning
  
5. a. Give the composition of urine. 3+7=10  
b. Write down the different type of urine collection.
  
6. a. What is the scientific name of RBC formation ? 2+8=10  
b. Describe the stages of formation of RBC with a neat diagram.
  
7. a. Write an essay on ABO blood group system. 8+2=10  
b. Which group is called the "Universal donor"?
  
8. Describe the process of Leucopoiesis 10

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