

MASTER OF MEDICAL LABORATORY
TECHNOLOGY
FIRST SEMESTER
SYSTEMIC MICROBIOLOGY
MMLT – 104

**SET
A**

[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

- Soiled cotton is disposed in which colour BMW bag
 - Red
 - Yellow
 - Blue
 - White
- Most of the bacteria grow at temperature between
 - 40-60 degree
 - 70-90 degree
 - 20- 40 degree
 - Below 10 degree
- Function of RNA primer
 - Synthesize short DNA
 - Unwind DNA helix
 - Join the fragments of DNA
 - None of the above
- Function of Semi-solid media
 - It will support the growth fastidious organism
 - It will support the growth normal flora
 - To see the mortality
 - Both a & b
- Paradoxical carrier is
 - Who acquires the pathogen from patient
 - A person who harbor the pathogen
 - A person who harbor the pathogen but never suffer
 - A carrier who acquire the pathogen from another carrier
- PCR is introduce by
 - Louis Pasteur
 - Kary Mullis
 - Edward Jenner
 - Peter Duesberg
- Albert stain is done to detect
 - Metachromatic granules
 - Gram positive bacteria
 - Capsule
 - Spore
- The temperature of sterilisation of materials in hot air oven
 - 160 degree Celsius
 - 120 degree Celsius
 - 100 degree Celsius
 - 50 degree Celsius

9. Agar percentage in semi-solid media
- | | |
|---------|------------------|
| a. 2-3% | b. Less than 1 % |
| c. 3-5% | d. More than 5% |
10. Which enriched media preferred for the growth of *Vibrio cholera*
- | | |
|---------------------------|---------------------|
| a. Nutrient agar | b. Selenite F broth |
| c. Alkaline peptone water | d. All of the above |
11. Who discover *Mycobacterium tuberculosis*
- | | |
|----------------|------------------|
| a. Robert Koch | b. Louis Pasteur |
| c. Loeffler | d. Yersin |
12. Bacteria grow & reproduce by
- | | |
|------------|-------------------|
| a. Sexual | b. Mitosis |
| c. Meiosis | d. Binary fission |
13. Which of the following statement is incorrect about Okazaki fragments
- | | |
|------------------------------|----------------------------|
| a. Its form Leading strand | b. Its direction is 5'-3' |
| c. Its short sequence of DNA | d. Its form Lagging strand |
14. Pasteurization of milk is done
- | | |
|------------------|----------------------|
| a. Holder method | b. Flash method |
| c. Both a& b | d. None of the above |
15. Viruses spread by Needle Stick Injury
- | | |
|-----------|-----------------|
| a. Dengue | b. Hepatitis C |
| c. HIV | d. Both b and c |
16. Which of the following area has the lowest chance of producing a biomedical waste?
- | | |
|-----------------|-----------------------|
| a. Hospitals | b. Clinics |
| c. Laboratories | d. Agricultural lands |
17. Which vaccination should be given to workers who deal with biomedical waste
- | | |
|-----------|-----------|
| a. HbsAg | a. HbsAg |
| c. Rabies | c. Rabies |
18. Main causative organism of UTI?
- | | |
|-------------------|----------------|
| a. E coli | b. Pseudomonas |
| c. Staphylococcus | d. Klebsiella |
19. As a precaution for COVID-19 waste, how many layers of bags are used?
- | | |
|------------------------|------------------------|
| a. Double layered bags | a. Double layered bags |
| c. Single layered bag | c. Single layered bag |
20. Physical methods of Sterilisation
- | | |
|-----------------|-----------------|
| a. Autoclave | b. Hot Air Oven |
| c. Both a and b | d. Only a |

-- -- -- --

(Descriptive)

Time: 2 hrs 30 min

Marks: 50

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

1. What are the different Physical methods of Sterilisation? Explain each with principle. 4+6=10
2. Write short notes on DNA replication. 10
3. Explain shortly about types of infection & mode of transmission of disease. 5+5=10
4. Classify the culture media. 10
5. Discuss Urinary Tract infection in details. 10
6. What do understand by Biomedical waste? What is Different colour coded bags as per latest Amendment. 2+8=10
7. What are the categories of BMW and describe the types of waste, treatment and disposal. List the guidelines of in COVID-19 waste management. 10
8. Write in details about Albert and ZN stain. 10

= = *** = =