

**BV (2)/ML & MDT-2.2/18 (MC)**

**2018**

**MEDICAL LABORATORY AND MOLECULAR  
DIAGNOSTIC TECHNOLOGY**

**QP : Medical Lab Technician**

Paper : S-2.2

**( General Microbiology )**

Full Marks : 40

Time : 2 hours

*The figures in the margin indicate full marks  
for the questions*

1. Fill in the blanks : 1×5=5

(a) The increase in bacterial cell number occurs by cell division, which is known as \_\_\_\_\_. *Growth*

(b) Gram-positive bacteria takes up the dye \_\_\_\_\_ and appears purple colour after gram staining. *crystal violet*

(c) Small circular bacterial DNA is called \_\_\_\_\_. *plasmid*

(d) \_\_\_\_\_ process which destroy pathogens but not all microbes in liquid. *pasteurization*

(e) The bacterial cell wall is chemically composed of \_\_\_\_\_. *Glyc*

8A/1041

*karishmita* ♥ ( Turn Over )

20 August 2024 1:53 pm

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2. Write short notes on any *five* of the following : 2×5=10

- (a) Disinfectant
- (b) Continuous culture
- (c) Cell line
- (d) Generation time
- (e) Bacterial spore
- (f) Cell wall
- (g) Culture media

3. Answer any *three* of the following questions :

5×3=15

- (a) Mention the difference between prokaryotic and eukaryotic cell.
- (b) Describe the bacterial growth curve.
- (c) Write a note on Koch's postulates.
- (d) Write about the techniques involved in isolation of pure culture in laboratory.
- (e) Write about the bacterial conjugation.

4. Answer any *one* of the following questions : 10

- (a) Compare the cell walls of gram-positive and gram-negative bacteria.
- (b) Classify bacteria based on shaped and arrangement with examples.
- (c) What is Gram staining? Write briefly about the gram stating procedure involved.

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karishmita  

8A—100/1041

20 August 2024, 11:20 AM 2/18 (MC)

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