

**BV (2)/ML & MDT-2.3/18 (MC)**

**2 0 1 8**

**MEDICAL LABORATORY AND MOLECULAR  
DIAGNOSTIC TECHNOLOGY**

**QP : Medical Lab Technician**

**Paper : S-2.3**

**( Laboratory Techniques on Pathology  
and 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) \_\_\_\_\_ is the process of destroying all pathogenic microorganisms, but not bacterial spores.

(b) ESR stands for \_\_\_\_\_.

(c) The average lifespan of RBC is \_\_\_\_\_.

(d) The best way to sterilize test tubes, flasks and throat swabs is \_\_\_\_\_.

(e) \_\_\_\_\_ blood group is the universal acceptor.

AB<sup>+</sup>

**8A/1042**

*karishmita* ♥ 

**( Turn Over )**

**20 August 2024 1:50 pm**

(OM) 31/8.2-100 (S 2) (S) 70

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

- (a) EDTA vial
- (b) Erythrocyte
- (c) Split number
- (d) Serial dilution
- (e) Mordant
- (f) Laminar air-flow cabinet
- (g) MacConcy media

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

5×3=15

- (a) Mention the difference between plasma and serum.
- (b) Mention the optical components of compound microscope.
- (c) Write a note on physical sterilization.
- (d) Describe the preparation of nutrient broth media.
- (e) Write a note on pure culture techniques.

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

- (a) What is anticoagulant? Mention the uses of different anticoagulants in biochemical analysis.
- (b) On which principle oven and incubator are based? What is their use in microbiology?
- (c) Describe the acid-fast bacteria (AFB) staining method of bacteria in detail.

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karishmita ♥ ✨