



# BRAINWARE UNIVERSITY

Term End Examination 2022

Programme – B.Sc.(MRIT)-2022

Course Name – Clinical Biochemistry & General Pathology

Course Code - BMRITC102

( Semester I )

Full Marks : 60

Time : 2:30 Hours

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

## Group-A

(Multiple Choice Type Question)

1 x 15=15

1. Choose the correct alternative from the following :

- (i) Gama-Gandy bodies are typically developed in chronic venous congestion of
- |           |           |
|-----------|-----------|
| a) Lung   | b) Kidney |
| c) Spleen | d) Liver  |
- (ii) Write the application of Autoclave used for sterilization
- |                           |                                  |
|---------------------------|----------------------------------|
| a) Principle of autoclave | b) Application in diagnostic lab |
|---------------------------|----------------------------------|
- (iii) Surface antigens on live cells can be interpreted by
- |                    |                 |
|--------------------|-----------------|
| a) RIA             | b) ELISA        |
| c) Electrophoresis | d) Both a and b |
- (iv) The major treatment of Lead poisoning
- |                     |                      |
|---------------------|----------------------|
| a) Chronotherapy    | b) Chelation Therapy |
| c) Lead replacement | d) Chemotherapy      |
- (v) Chronic poisoning involves
- |                        |                           |
|------------------------|---------------------------|
| a) Multi-organ failure | b) Targeted organ failure |
| c) blood loss          | d) Numbness               |
- (vi) The compound used for Chelation Therapy
- |            |                 |
|------------|-----------------|
| a) Heparin | b) Tetracycline |
| c) EDTA    | d) All of these |
- (vii) What solution is used to maintain sterility in labs ?
- |                        |                    |
|------------------------|--------------------|
| a) Sodium chloride     | b) Sodium cyanide  |
| c) Sodium hypochlorite | d) Sodium sulphate |
- (viii) Autoclaves are used in the medical applications to perform \_\_\_\_\_
- |                  |                  |
|------------------|------------------|
| a) Vulcanization | b) Sterilization |
| c) Heating       | d) Cleaning      |
- (ix) Propose the phagocytic cell in brain
- |                     |                   |
|---------------------|-------------------|
| a) Microglia        | b) Ependymal cell |
| c) Oligodendrocytes | d) Astrocytes     |
- (x) In most laboratories the commonest test performed to estimate plasma glucose is :
- |                  |                   |
|------------------|-------------------|
| a) Folin Wu test | b) Fehling's test |
|------------------|-------------------|

- c) Hexokinase test  
 (xi) Rise in blood urea in pre-renal cases is mainly due to :  
 a) Dehydration  
 c) Due to renal failure  
 (xii) Decreased BUN  
 a) Severe stress  
 c) Diabetic ketoacidosis  
 (xiii) In order to stop the reaction between enzyme and substrate, what process is needed  
 a) Incubate the sample at 100oC  
 c) Wash sample with PBS-Tween  
 (xiv) What is the role of goat anti-rabbit IgG horseradish peroxidase conjugate in the experiment?  
 a) Antigen  
 c) Secondary antibody  
 (xv) Which is working principle of ELISA ?  
 a) Ag-Ab neutralization  
 c) Ag-Ab neutralization & Ag-Ab complex
- d) Benedict test  
 b) Multi organ failure  
 d) Increased urea synthesis  
 b) Myocardial infraction  
 d) Celiac disease  
 b) Add Stop solution  
 d) Add blocking solution to sample  
 b) Primary antibody  
 d) Substrate  
 b) Ag-Ab complex  
 d) None of these

**Group-B**

(Short Answer Type Questions)

3 x 5=15

2. Differentiate between water bath and incubator (3)
3. Illustrate the tissue sectioning process and its application. (3)
4. Elaborate the zinc toxicity and its prevention (3)
5. Write about the types of the stages of shock with examples. (3)
6. Explain RIA and its clinical significance (3)

**OR**

Explain how to assess the glycosuria patient by urine analysis (3)

**Group-C**

(Long Answer Type Questions)

5 x 6=30

7. Categorize the types of hemodynamic shock in the patients. (5)
8. Evaluate the Kidney Function TEST and interpret it. (5)
9. Calculate therapeutic index of drug (5)
10. Explain the clinical significance of CK-MB in pathogenesis. (5)
11. Explain Inflammation with symptoms. (5)
12. Explain the pathophysiology of myocardial ischemia with a diagram. (5)

**OR**

Deduce the mechanism of wound healing. (5)

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