

# Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.Sc. Allied Health Sciences Degree Examination – 27-Nov-2023

**Time: Three Hours**

**Max. Marks: 80 Marks**

## **BIOCHEMISTRY**

(RS3 – Medical Laboratory Technology, Medical Imaging Technology and Radiotherapy Technology  
RS2 – Operation Theatre Technology, Cardiac Care Technology, Perfusion Technology, Renal Dialysis  
Technology, Respiratory Care Technology, Anaesthesia Technology and Neurosciences Technology)

**Q.P. CODE: 3153**

Your answers should be specific to the questions asked.

Draw neat, labeled diagrams wherever necessary

### **SHORT ESSAYS (Answer Any Eight)**

**8 x 5 = 40 Marks**

1. Write the principle, components and working of analytical balance.
2. Segregation of biomedical wastes.
3. Define and classify lipids.
4. Henderson-Hasselbach equation.
5. Classification of amino acids based on structure.
6. Define centrifugal force. Describe the working and types of centrifuges.
7. Define nucleotides and nucleosides. Add a note on its functions.
8. Classification of monosaccharides.
9. Define normality. How do you prepare 100ml of 2N NaOH from 10N NaOH?
10. Explain physical and chemical hazards.

### **SHORT ANSWERS (Answer Any Ten)**

**10 x 3 = 30 Marks**

11. Saturated solutions.
12. Diagram of water distillation plant. Add a note on its working.
13. First aid kit.
14. Uses of radioactive isotopes in diagnostic field.
15. Define and classify SI units.
16. Beer Lamberts law and its limitations.
17. Difference between stock and working solution.
18. ABG analysis.
19. Define a) Equivalent weight b) Molecular weight c) Valency
20. What are essential amino acids? Name them.
21. Responsibilities of health care personnel.
22. Working of Hot Air Oven.

### **TO THE POINT ANSWERS (Answer Any Five)**

**5 x 2 = 10 Marks**

23. Indicators. Give one example.
24. Cyclomixer.
25. Care of pH meter.
26. Plastic ware in laboratory.
27. Burettes.
28. Bicarbonate buffer.
29. Difference between starch and glycogen.

\*\*\*\*\*