

# Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.P.I, Degree Examination — SEP-2016

Time; Three Hours

**BIOCHEMISTRY (RS-5)**

max. Marks: 50 Marks

**Q.P. CODE: 2733**

**For viva() t4**

Your answers should be specific to the questions asked  
Draw neat, labeled diagrams wherever necessary

**LONG ESSAYS (Answer any Two)**

**2 x 10 = 20 Marks**

1. **Classify carbohydrates with examples. write biological importance of any two**
2. **Describe the chemistry, source, absorption, daily requirements, deficiency disorders and biochemical role of vitamin A.**
3. **Describe in detail the steps of Urea Cycle. Write the causes of Uremia.**

**SHORT ESSAYS (Answer any Eight)**

**8 x 5 = 40 Marks**

4. **What are mucopolysaccharides? Name the functions and composition of four mucopolysaccharides.**
5. **Structure and functions of DNA**
6. **Digestion, acid absorption of lipids- Mention the two causes of fatty stools**
7. **Describe protein structure.**
8. **Explain the functions and deficiency manifestation of Thiamine,**
9. **Gluconeogenesis**
10. **Biological important compounds derived from cholesterol**
11. **5100-d buffers and their role in acid base balance**
12. **Formation and function of collagen**

**13, Functions of Iron**

**SHORT ANSWERS**

**10 x 2 = 20 Marks**

**14. Define Respiratory Quotient (RQ). Write the RQ values of carbohydrates, lipid and proteins. 15\_ Protein energy malnutrition**

16. **Functions of plasma membrane**
17. **Renal threshold for glucose and its significance**

**16. Sodium potassium pump**

19. **Define metabolic alkalosis and mention two causes**
20. **Mention the functions of cyclic AMP,**
21. **Normal blood urea Level. Mention two causes of Uremia**
22. **Alkaptonuria**
23. **Carnitine cycle •**

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