

Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.P.T. Degree Examination – September 2014

Time: Three Hours

Max. Marks: 80 Marks

BIO-CHEMISTRY (RS-3 & RS-4)

Q.P. CODE: 2703

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary. Answer all questions

LONG ESSAYS (Answer any Two)

2 x 10 = 20 Marks

1. Name the fat-soluble vitamins. Describe the formation of active form of Vitamin D, its biochemical functions and deficiency manifestations.
2. Enumerate Renal function tests. Define clearance test and add a note on Creatinine clearance test and its importance.
3. Describe urea cycle and name two inborn errors associated with this cycle.

SHORT ESSAYS (Answer any Eight)

8 x 5 = 40 Marks

4. Biochemical functions of Vitamin C.
5. Fluid mosaic model of cell membrane
6. Metabolic acidosis
7. Functions and deficiency manifestations of Thiamine
8. Describe the synthesis of ketone bodies and mention two causes of ketosis.
9. Name the plasma lipoproteins and describe their functions.
10. Define Basal Metabolic Rate (BMR). Write its normal values and explain the factors affecting it.
11. Structure and functions of DNA
12. Describe the factors affecting the enzymes action.
13. Mucopolysaccharides

SHORT ANSWERS

10 x 2 = 20 Marks

14. Mention two metabolic functions of mitochondria.
15. Mention two enzymes of diagnostic importance in myocardial infarction.
16. Coenzyme forms of Riboflavin and Niacin.
17. Mention two causes of obstructive jaundice.
18. Give the normal values of a) Serum total bilirubin b) Serum Urea
19. Phenylketonuria
20. Transamination
21. Van den Bergh reaction
22. Name primary and secondary bile acids.
23. Give the normal values of a) Serum total cholesterol b) Serum Creatinine.
