

Q.P. CODE: 103016

Reg. No:

First Year B.Sc Perfusion Technology Degree Examinations, August 2014

Biochemistry

Time: 3 Hrs

Max. Marks:80

- Answer all questions
- Draw diagram wherever necessary

Essays:

(2×10=20)

1. Explain the important Buffer systems in regulating the body pH
(2½ +2½ +2½ +2½ =10)
2. Enumerate the glass wares used in clinical biochemistry.Mention the use and care of any 4 items.
How do you clean the used and new glass ware. (2+4+4=10)

Short notes:

(6×5=30)

3. Explain the steps for the preparation of exactly 0.1 N NaOH solution by secondary titration
4. Principle and use of colourimeter
5. Compare the different models of atomic structure.
6. Explain the significance in laboratory practice about water of crystallization, hygroscopic and deliquescent salts.
7. Principle and use of sensitivity and specificity in clinical laboratory practice.
8. Blood gas analysis

Answer briefly:

(10×3=30)

9. Ionization of water, H ion concentration and pH.
10. Use of centrifuge
11. Nutritional importance of lipids.
12. Liver function tests
13. Principle of serum electrophoresis. Name one abnormal band seen.
14. Biochemical changes seen and causes of metabolic acidosis
15. How do you evaluate the limits of error in a laboratory.
16. Normal values of common six electrolytes in blood.
17. Calorific value of carbohydrates, proteins and lipids.
18. Enumerate the renal function tests, the functions tested and significance.
