

**Shree Manibhai Virani and Smt. Navalben Virani Science College (Autonomous)**

Affiliated to Saurashtra University, Rajkot

**SEMESTER END EXAMINATION NOVEMBER – 2016****B.Voc. Medical Laboratory and Molecular Diagnostic Technology****MLMDT-1.3 - BASICS OF BIOCHEMISTRY, INSTRUMENTS AND REAGENTS***Duration of Exam – 3 hrs**Semester – I**Max. Marks – 70***Que. 1 Answer the following****[20]**

1. Give an example of aldo hexose sugar.
2. The general formula of monosaccharide is\_\_\_\_\_.
3. Starch is basically made up of \_\_\_\_\_ and \_\_\_\_\_.
4. Write an example of disaccharide which is reducing in nature.
5. Give two examples of basic amino acids.
6. \_\_\_\_\_ bond is formed between Methionine and cysteine.
7. Haemoglobin is an example of chromoprotein. True/False
8. \_\_\_\_\_ amino acid is sweet in taste.
9. Sphingomylin is \_\_\_\_\_
10. Define: Unsaturated fatty acids.
11. Give an example of steron.
12. Waxes are made up of \_\_\_\_\_ and \_\_\_\_\_.
13. Write down Chargaff's rule of nucleic acids.
14. Enlist various types of objective lenses found in compound microscope.
15. Define: pH
16. Enlist various types of bonds observed in structure of DNA.
17. Define: Enzymes.
18. Write: Lambert's law for colorimetry.
19. What is Apo enzyme?
20. NAD, FAD are examples of \_\_\_\_\_

**Que. 2 (A) Answer in brief (Any 3)****[6]**

1. What do you mean by Keto sugar? Give few prominent examples.
2. What are non polar aminoacids? Give example
3. Define: Isoelectric point.
4. What do you mean by essential amino acids?
5. How holoenzyme formation takes place?
6. How will you make one molar solution of any compound?

- Que. 2 (B) Answer in brief (Any 3)** [9]
1. What is tautomerization of sugars?
  2. What is alpha pleated structure of protein?
  3. How nucleotides are given their names?
  4. Describe alloster with an example.
  5. Write the classification of fatty acids.
  6. Write the principle of autoclave and enlist its parts.
- Que. 2 (C) Answer in detail (Any 2)** [10]
1. Describe Polysaccharides with suitable examples.
  2. Describe the structure of DNA.
  3. Discuss classification of amino acids.
  4. Discuss conjugant lipids with suitable examples.
  5. Write a note on microscope.
- Que. 3 (A) Answer in brief (Any 3)** [6]
1. Write occurrence of lactose and sucrose in nature.
  2. Draw the structure of any purines.
  3. Define rancidity. Give two examples of antioxidants.
  4. Define: Coenzyme. Give Example.
  5. What is the principle of Autoclave?
- Que. 3 (B) Answer in brief (Any 3)** [9]
1. Write the features of monosaccharides.
  2. Explain organization of DNA in eukaryote in brief.
  3. What is Cofactor and prosthetic group? Write an example of Cofactor and prosthetic group.
  4. What is the working principle of pH meter?
  5. Discuss Phospholipid.
- Que. 3 (C) Answer in detail (Any 2)** [10]
1. Write short note on Enzyme inhibition.
  2. Discuss Steroids in detail.
  3. Discuss classification of proteins.
  4. Discuss Urea cycle
  5. Write a note on flame photometer.
-