

**B.Sc. CARDIO PULMONARY PERFUSION CARE TECHNOLOGY  
FIRST YEAR  
PAPER II – BIOCHEMISTRY AND PATHOLOGY**

*Q.P. Code: 801402*

**Time: Three Hours**

**Maximum: 100 Marks**

**Answer all questions**

**I. Elaborate on:** **(3 x 10 = 30)**

1. Explain in detail about the sources, requirements, functions and deficiency states of fat soluble Vitamins.
2. Define inflammation. Enumerate the signs of inflammation. Explain the sequential vascular and cellular events of acute inflammation.
3. Define respiratory acidosis. Explain the investigation related to the biochemical changes that take place in this condition.

**II. Write notes on:** **(8 x 5 = 40)**

1. Marasmus.
2. Morphological features of rheumatic heart disease.
3. Dengue fever.
4. Reversible cell injury.
5. Mechanisms of autoimmunity.
6. Coagulation cascade.
7. Glycogenolysis.
8. Factors affecting enzyme activity.

**III. Short answers on:** **(10 x 3 = 30)**

1. Define metaplasia.
2. Write any three fungal infections with causes.
3. Types of necrosis.
4. Deficiency state of Vitamin B<sub>12</sub>.
5. List any four opportunistic infections in Acquired immuno deficiency syndrome.
6. What are ketone bodies? Give examples.
7. Define normality.
8. What is acidosis?
9. What are co-enzymes? Give two examples of co-enzymes.
10. Origin and function of plasma cells.