

**B.Sc. RESPIRATORY THERAPY**  
**FIRST YEAR**  
**PAPER III – BIOCHEMISTRY AND PHARMACOLOGY**

*Q.P. Code: 802603*

**Time: Three Hours**

**Maximum: 100 Marks**

**Answer all questions**

**I. Elaborate on:**

**(3 x 10 = 30)**

1. (a) Classify Anti-asthma drugs with examples.  
(b) Write a short note on mechanism of action, different formulations, therapeutic uses and adverse drug reactions of Salbutamol.
2. Define and classify Vitamins. Write in detail about the structure, synthesis, functions, sources recommended daily allowances and deficiency diseases of Vitamin C.
3. Classify lipids with suitable examples. Add a note on physiological importance of lipids.

**II. Write notes on:**

**(8 x 5 = 40)**

1. Amoxicillin.
2. d-Tubocurarine.
3. H<sub>1</sub> receptor blockers.
4. Phenobarbitone.
5. Clonidine.
6. Structure and functions of Immunoglobulins.
7. Mucopolysaccharides.
8. Functions of Calcium and Phosphorus.

**III. Short answers on:**

**(10 x 3 = 30)**

1. Any 3 examples of (a) ACE blockers (b) Sedatives.
2. Any 3 therapeutic Uses and adverse drug reactions of corticosteroids.
3. First-Pass metabolism.
4. Advantages and disadvantages of aerosol preparation with examples.
5. Expectorants.
6. Name 3 sulfur containing amino acid.
7. Name any 3 pyrimidine bases.
8. Deficiency of Vitamin D and its signs and symptoms.
9. Explain nitrogen balance.
10. What are allosteric enzymes? Give examples.

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