

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. Explain the synthesis of vitamin D in body. List its functions. Add a note on vitamin D deficiency disorders.
2. Explain the different routes of drug administration with their advantages and disadvantages.
3. Explain the factors affecting enzyme activity.

II. Write notes on:

(8 x 5 = 40)

1. Write a note on sources and functions of vitamin C.
2. Classify the different generation of antihistamines with an example each. List their clinical applications.
3. Explain the role of glycogen in body.
4. What are the actions of insulin? Name four types of insulin in clinical practice with examples.
5. Explain the functions of calcium.
6. Write a note on antitubercular drugs.
7. Write a note on local anesthetics.
8. List the different bronchodilator drugs used in clinical practice and indicate their mechanism of action.

III. Short answers on:

(10 x 3 = 30)

1. What are dietary fibers? What are their beneficial effects?
2. What are antitussives? Give examples.
3. Explain basal metabolic rate.
4. What is Succinyl choline? What are its applications?
5. Name the ketone bodies. List two conditions associated with ketoacidosis.
6. What are isoenzymes? Give an example.
7. What is aspirin? What is its mechanism of action?
8. Name the plasma proteins and list their functions.
9. What are proton pump inhibitors? Give two examples.
10. What are essential amino acids? Name any 4.
