



**The West Bengal University of Health Sciences**  
**B.Sc Nursing 1st Semester March Examination, 2023**

**Subject: Applied Anatomy & Applied Physiology**

**Applied Physiology**

**Time: 1½ Hours.**

**Full Marks: 38**

*Attempt all questions*

1. Describe the mechanism of respiration. 1 x 10  

*or*

Describe the functions of thyroid hormone. Name the diseases of hypo and hyper secretion of thyroid hormone.
2. Write short notes of **any three** of the following : 3 x 5
  - a) Functions of liver.
  - b) Gas exchange in lungs.
  - c) Enumerate the functions of Saliva.
  - d) Cardiac cycle.
3. Answer **any three** of the following : 3 x 2
  - a) Composition and functions of cerebrospinal fluid
  - b) Name any two hormones produced by ovary.
  - c) Name the branches of coronary artery.
  - d) Name the two important waste products excreted by the Kidneys
4. Encircle the most suitable answer of the following questions : 7 x 1
  - a) Name the site where digestion of proteins occurs.
    - i) Pancreas      ii) Rectum      iii) Liver      iv) Ileum
  - b) Functional units of food absorption is:
    - i) Red blood cells      ii) Small intestine      iii) Villi      iv) Aggregated lymphoid nodules
  - c) The maximum amount of carbon dioxide in the human body is transported as:
    - i) Bicarbonate      ii) Carbide      iii) Amylase      iv) None of the above
  - d) During severe exercise, oxygen consumption is greatest in:
    - i) Brain      ii) Heart      iii) Skeletal muscle.      iv) Liver.
  - e) The primary function of the cerebrospinal fluid is to:
    - i) Protect the brain      ii) Provide nutrients to the surrounding tissues
    - ii) Remove waste products      iv) All of the above
  - f) Hypopnea is a condition where:
    - i) The airway becomes partially obstructed
    - ii) The blood does not clot properly
    - iii) The lungs cannot eliminate the excess carbon dioxide from the body
    - iv) The blood oxygen levels are abnormally low
  - g) When Sympathetic Nerves get activated, it releases:
    - i) Adrenaline, which stimulates the organ      ii) Adrenaline, which inhibits the organ
    - ii) Acetylcholine, which stimulates the organ.      iv) Dopamine which stimulates the organ.