

**PHYSIOLOGY PROGRAM**  
**COLLEGE OF HEALTH SCIENCES**  
**BOWEN UNIVERSITY IWO**  
**OSUN STATE, NIGERIA**  
**300 LEVEL PHYSIOLOGY EXAMINATION**  
**PHS 323: CARDIOVASCULAR PHYSIOLOGY I**  
**(1<sup>st</sup> SEMESTER, 2022/2023 SESSION)**

**Allocated Time:** 3 hours

**Venue:** COHES Red Hall

**Date:** February 16th, 2023

**Instruction:** Attempt **ALL** questions. Ensure that your matriculation number is clearly written on each page of your answer booklet.

- 1.) Explain the physiological mechanism underlying regulation of arterial blood pressure. **(20 marks)**
  
- 2.) Give a detailed description of cardiovascular adjustments during moderate exercise. **(20 marks)**
  
- 3.) The sinoatrial node is the pacemaker responsible for generation of electrical signals in the heart. Provide an explanation for this physiological process. **(10 marks)**
  
- 4.) Discuss physiological variations of cardiac output. **(10 marks)**
  
- 5.) The cardiac cycle is associated with some mechanical events / changes. Discuss. **(10 marks)**