

**PHYSIOLOGY PROGRAM**  
**COLLEGE OF HEALTH SCIENCES**  
**BOWEN UNIVERSITY IWO**  
**OSUN STATE, NIGERIA**  
**200 LEVEL PHYSIOLOGY EXAMINATION**  
**PHS 221: BLOOD PHYSIOLOGY (1<sup>st</sup> SEMESTER, 2022/2023 SESSION)**

**Allocated Time:** 3 Hours

**Venue:** COHES Red Hall

**Date:** February 11th, 2023

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

- 1.) A pregnant woman with blood group O<sup>-</sup> had a miscarriage of her second pregnancy following a previous delivery of an O<sup>+</sup> baby. Explain the likely physiological basis for this experience, stating possible preventive measures. **(20 marks)**
- 2.) Immuno-globulins are the foot soldiers of the immune system. What does this mean? **(10 marks)**
- 3.) Helper T-cells are the major regulators of immune function. Discuss. **(10 marks)**
- 4.) The availability of oxygen for body use is a function of iron-containing pigment of blood. Discuss. **(10 marks)**
- 5.) Immunity to a disease is achieved when the body system produces antibodies to that disease. Discuss. **(20 marks)**