



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY**  
**SCHOOL OF BIOLOGICAL AND PHYSICAL SCIENCES**  
**UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF EDUCATION**  
**(SCIENCE)**  
**4<sup>TH</sup> YEAR 2<sup>ND</sup> SEMESTER 2019/20**  
**SPECIAL EXAM**  
**MAIN REGULAR**

---

**COURSE CODE: SPH 402**

**COURSE TITLE: STATISTICAL MECHANICS**

**EXAM VENUE:**

**STREAM: (BED SCI)**

**DATE:**

**EXAM SESSION:**

**TIME: 2:00HRS**

---

**Instructions:**

- 1. Answer question 1 (Compulsory) in Section A and ANY other 2 questions in Section B.**
- 2. Candidates are advised not to write on the question paper.**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room**

**Useful constants**

Planck's constant =  $6.63 \times 10^{-34}$  J s

Velocity of light in free space =  $3.0 \times 10^8$  m/s

Boltzmann's constant =  $1.38 \times 10^{-23}$  J/K