

**BOWEN UNIVERSITY, IWO**  
**COLLEGE OF AGRICULTURE, ENGINEERING AND SCIENCE**

**2021/2022 FIRST SEMESTER EXAMINATION**  
**BLY 405: BIOENTREPRENEURSHIP**

Answer **THREE** questions only: **ONE** question from Section A and any **TWO** from Section B.

*Time allowed: 1 hour 30 minutes*

**SECTION A**

1. Write short notes on the following:
  - (a) Bio-discovery *(5 marks)*
  - (b) Bio-innovation *(5 marks)*
2. (a) How will you address the issue of contamination in your plan towards establishing a PCR laboratory. *(5 marks)*
  - (b) List five equipment and five Personal Protective Equipment (PPE) required in a molecular laboratory. *(5 marks)*

**SECTION B**

3. (a) Give a concise account of any five qualities of a bioentrepreneurs. *(15 marks)*
  - (b) Write short note on the term "Patent". *(5 marks)*
4. (a) Mention the steps involved in tissue culture for mushroom cultivation. *(5 marks)*
  - (b) Enumerate the precautions to be taken during the process mentioned in (a) above. *(5 marks)*
  - (c) Write concisely on large-scale production of mushrooms. *(10 marks)*
5. Briefly describe the production of the following bio-products with emphasis on microbial processes and economic importance.
  - (a) Biogas *(4 marks)*
  - (b) Yoghurt *(4 marks)*
  - (c) Beer *(4 marks)*
  - (d) Bioethanol *(4 marks)*
  - (e) Cosmetics *(4 marks)*