**Laboratory Learning Outcomes and Objectives**

**Laboratory 5: BOTANY PART 2: KINGDOM PLANTAE – GYMNOSPERMS AND ANGIOSPERMS. PLANT FORM AND FUNCTION.**

*After completion of this laboratory session, and with 70% accuracy on the first laboratory quiz, the student should be able to:*

1. Describe the distinguishing features of gymnosperms
2. Understand the life cycle of a pine
3. Explain the major evolutionary advances of the gymnosperms over the ferns
4. Understand some adaptations of evergreens to cold, dry environments
5. Identify the parts and understand the function of a cone
6. Identify the parts and understand the function of a seed
7. Describe the life cycle of angiosperms (flowering plants)
8. List and give the functions of the principal parts of a flower
9. Describe the events associated with the development of microspores, megaspores, seed, endosperm and fruits in angiosperms
10. Describe the structure and function of roots, stems, and leaves.
11. Know and list the differences between monocots and eudicots
12. Answer the review questions at the end of the exercises