Palestine Polytechnic University

College of Engineering

Structural Design of Plant Biodiversity Research Center

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DEDICATION

To Palestine…

To our Parents….

To The Soul of Martyrs….

To our Teachers ….

To our Friends …

To whom we Love ….

To Everyone who gave us Help …

To ENG. Fahed Salahat …

Team Work

ACKNOWLEDGMENT

We would like to thank and send our gratitude to Allah, who gave us the strength who granted us the ability and willing to start this project.

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Team Work

ABSTARCT

The idea of this project revolves around the architectural and Structural design of " Plant Biodiversity Research Center " in Al-arroub, which was selected after a study set of different architectural projects.

The center consists of four floors including basement floor and stores .The basement floor consists of a store ,generator room and air conditioning room. The ground floor consists of cafeteria , kitchen, store ,gallery, video conference , theater , chapel, toilets and offices room. The first floor consists of plant storing, plant desiccation, plant Packaging, plant receipt, seeds store, herbarium, seeds Packaging, seeds desiccation, seeds sorting and sifting, seeds receipt, toilets, offices room, plant microbiology lab, plant physiology lab, Molecular biology lab and extra rooms, the second floor consists of library, office, printing hall, publication store, raw material store, toilets and lecture rooms, the third floor consists of finance manager, secretary rooms, manager room, manager assistant, archive room, personnel officer, stores and toilets, in addition warehouses third-party tools , a water cistern and a parking.

The main aim of this project is to prepare all the structural design and construction details of the:

1. Theater.
2. Library.
3. Management rooms.
4. Gallery.
5. Chapel.
6. Cafeteria.
7. Conference Hall Lecture halls.
8. Stores.
9. Computer halls and Concerns literal.

All of these elements are located in the Plant Biodiversity Research Center in Al-arroub.

The project contains the structural analysis for vertical and horizontal loads, the structural design, and details for each element. ACI 318m-14, Jordanian loads code 2006, and some engineering programs were used in the design of the structures.

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