# DESIGN OF A SPORTS HALL

## Project Report submitted by: PAPALEONTIOU COSTAS

In part satisfaction of the award of Diploma of Technician Engineer in Civil Engineering of the Higher Technical Institute

Project Number : C/644

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### SUMMARY

#### DESIGN OF A SPORTS HALL

#### COSTAS PAPALEONTIOU

Project No.: C/644

This project deals with the design of a Sports Hall which includes a basket-ball court, a hand-ball court, a volley-ball court and a table tennis court.

The project report is divided into three chapters.

The first chapter deals with the feasibility of the Construction. Information on the type of roof frame which can be used are given. The Portal Frame Construction was chosen and the moment distribution method was not used since it is quite laborious. A simplified method was followed by making use of formulae which are provided through STEEL DESIGNERS MANUAL. Finally the materials to be used in our construction are given.

The evaluation of Moment and Bending Moment Diagrams from the different Loading Combinations are given in the second chapter.

The third chapter deals with the design of the various parts.

Lastly, in the Appendix architectural and detailing drawings, tables used in the design and information relevant to the project are given.

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