

**D. Y. Patil Technical Campus, Polytechnic,
Talsande, Kolhapur.**

Visit Report

On

Gol Gumbaz, Vijayapura (Karnataka)

Date: 04/10/2025

Our civil engineering department had arranged an Industrial Visit for FY CE class under the course of **CIVIL ENGINEERING WORKSHOP (311010)**. The venue was **Gol Gumbaz, Vijayapura (Bijapur), Karnataka..** Within visit students were came across the following points.

- 1) Heritage / Ancient Design of Structure
- 2) Material Used to Build these Structure
- 3) Life Span of Structure
- 4) History of Structure

For this visit total 38 students were present along with 2 faculty members of the department.

HOD

Department of civil Engg

1. Introduction

An educational tour to **Gol Gumbaz, Vijayapura**, was organized for First-Year Civil Engineering students to understand ancient construction techniques, architectural planning, and structural stability of historical monuments. This visit helped students relate basic civil engineering concepts such as materials, geometry, load distribution, and acoustics with real-life structures.

2. About Gol Gumbaz

Gol Gumbaz is a famous historical monument located in **Vijayapura (Bijapur), Karnataka**. It is the mausoleum of **Sultan Mohammed Adil Shah**, built in the 17th century. Gol Gumbaz is renowned for having one of the **largest masonry domes in the world**, constructed without any supporting pillars.

Key Features:

- ❖ One of the largest domes in India
- ❖ Constructed using stone and lime mortar
- ❖ Square base with a massive circular dome
- ❖ Famous **Whispering Gallery** with unique acoustic properties

3. Objectives of the Visit

The main objectives of the visit were:

- ❖ To study **ancient construction methods** and materials
- ❖ To develop interest in **heritage structures and conservation**

4. Observations during the Visit

- The dome of Gol Gumbaz is supported by thick masonry walls instead of columns, showing excellent load distribution.
- The structure uses **lime mortar**, which has provided durability for several centuries.
- The **Whispering Gallery** demonstrates the importance of acoustics and sound reflection in structural design.
- The monument has massive arches, walls, and staircases which reflect strong engineering skills of ancient times.

5. Conclusion

- The educational tour to Gol Gumbaz was very informative and inspiring. It provided practical exposure to historical civil engineering marvels and enhanced students' understanding of basic engineering concepts. The visit successfully connected classroom learning with real-world structures.

