## Guru Ghasidas Vishwavidyalaya (A Central University Established by the Central Universities Act 2009 No. 25 of 2009)

Koni, Bilaspur - 495009 (C.G.)

### VOCATIONAL TRAINING REPORT

ON

OVERHAULING OF COACHES AND WAGONS

AT

SOUTH EAST CENTRAL RAILWAY, BILASPUR



By: Annadaa Vivek Kalaskar (20104009)

Enrollnment No .: GGV/20/01709



# BACHELOR OF TECHNOLOGY IN MECHANICAL ENGINEERING

DEPARTMENT OF MECHANICAL ENGINEERING, SCHOOL OF STUDIES AND TECHNOLOGY, GURU GHASIDAS VISHWAVIDYALAYA, KONI, BILASPUR (C. G.) MAY-JUNE 2023

1 | Page

## Table of Content

Sr No.	Content	Page No.
1.	Acknowledgement	02
2.	Preface	03
3.	Introduction	05
4.	About the Indian Railways	06
5.	CHG Care Centre	10
6.	BCN Depot	18
7.	Conclusion	30
8.	References	31
9.	Certificate	32

4 | Page

#### Introduction

Our Vocational Training was given by South East Central Railway (SECR). SECR is headquartered at Bilaspur. Due to this, Bilaspur is a big hub for repairing and maintaining of railways. Bilaspur is one of the biggest railway junctions of India. The vocational training was divided into two parts in which the first two weeks were covered in CHG Care Centre where passenger trains such as Express trains, Duronto Express, Rajdhani Express, Vande Bharat, etc. trains are repaired and cleaned and the remaining two weeks were covered in at BCN coach depot where maintenance of wagons which carry coal and other goods are done. SECR also has an Electric Locomotive shop at Bilaspur where electrical Train engines undergo maintenance. It has recently been setup so it doesn't have all facilities as of now. So, for this internship only BCN depot and CHG care centerwere allotted to us.

First two weeks of training was done at CHG Care Centre where passenger trains are maintained. Here the training was further divided into two parts:

- 1. ICF coaches: 7 days
- 2. LHB coaches: 7days

The other two weeks were covered at BCN Wagon Depot where goods Wagon undergo Scheduled Maintenance. In BCN depot, all types of goods trains both open and closed were repaired and maintained.

One of the earliest production units of India was the Integral Coach Factory (ICF) which was inaugurated by our first Prime Minister Pandit Jawaharlal Nehru. The frame of the coach was made with mild steel and was a fabricated structure. Though it was the earliest coach model of India, the Linke Hofmann Busch (LHB) coach was better than the former in many terms. The Linke Hofmann Busch could operate at a higher speed in comparison to the Integral Coach Factory and its maximum permissible speed is 160 kilometres per hour. While the permissible speed for the ICF coach is just 110 kilometres per hour.

5 | Page



## Guru Ghasidas Vishwavidyalaya

(A Central University Established by the Central Universities Act 2009 No. 25 of 2009) Koni, Bilaspur - 495009 (C.G.)

