**GURU TEGH BAHADUR INSTITUTE OF TECHNOLOGY**

**G-8 AREA, RAJOURI GARDEN, NEW DELHI**

**Course: Workshop Technology**

**B.Tech. (Common to all Branches)**

**Semester: IInd Subject Code: ES164**

**Credit: 1, Period: 2**

**Question Bank**

**Unit 1**

Safety, precautions and maintenance: Safety in shop, safety devices, safety and precautions - moving machine and equipment parts, electrical parts and connections, fire, various driving systems like chain, belt and ropes, electrical accidents, an overview of predictive, preventive and scheduled maintenance, standard guidelines to be followed in shop.

Ques1. Define workshop and its purpose.

Ques2. What are t safety precautions must be taken care while working on shop floor?

Ques3. What are possible causes of an accident in workshop?

Ques4. What is predictive, preventive and scheduled maintenance?

Ques5. What are the guidelines to be followed in workshop?

Ques6. What is layout? Explain different types of layout and draw the layout of your workshop area.

**Unit 2**

Introduction to machine shop: Introduction to Lathe, Milling, shaper, Planer, grinder, drilling and overview of operations performed on these machines by making some jobs.

Ques1. What is the difference between a machine and machine tool?

Ques2. Write the working principle of Lathe, shaper and milling machine.

Ques3. Write the application of Lathe, shaper and milling machine.

Ques4. Write the important operation of Lathe, shaper and milling machine.

Ques5. Draw the line diagram of Lathe, shaper and milling machine with labels.

Unit 3

Introduction to welding shop: Types of welding, tools and applications, gas welding and arc welding, edge preparation, various joints formation by gas welding and electric arc welding.

Ques1. Briefly explain the principle of electrical arc welding and gas welding.

Ques2. Briefly explain the setup of electric arc welding and gas welding.

Ques3. Briefly explain the electrode used in welding.

Ques4. Briefly explain the types of joint and edge preparation in welding.

**Unit 4**

Introduction to sheet metal shop: Sheet metal tools and operations, formation of a box using sheet. Introduction to fitting shop: Introduction to fitting, tools and applications, some jobs in fitting shop.

Ques1. Briefly explain the purpose of sheet metal and fitting shop.

Ques2. Explain the tools used in sheet metal shop.

Ques3. Explain the tools used in fitting shop.

Ques4. Explain the various operations in sheet metal

Ques5. Explain the various operations in fitting shop.

Ques6. Explain different types of materials used in sheet metal shop and fitting shop.