



**Nepal Rastra Bank**  
**Syllabus for**  
**Pantograph Machine Operator**  
Contract

## Stages of Examination

- |  |                        |                       |
|--|------------------------|-----------------------|
| 1. <b>First Stage:</b> Written Examination | <b>Full Marks: 100</b> | <b>Pass Marks: 40</b> |
| 2. <b>Second Stage:</b> Interview          | <b>Full Marks: 20</b>  |                       |

### Remarks:

1. In written examination, questions shall be asked in English.
2. Objective questions will be asked.
3. 20% marks will be deducted for each incorrect answer.
4. The candidates selected from the written examination will be called for the second stage examination.
5. This syllabus is applicable from September 11, 2023.

### **First Stage: Written Examination Full Marks: 100 Time : 1 hour**

Examination System	Section	Number of Question and Marks	Marks
<b>Multiple Choice Questions</b>	1	10 questions × 2	20
	2	10 questions × 2	20
	3	10 questions × 2	20
	4	10 questions × 2	20
	5	10 questions × 2	20
<b>Total</b>		<b>50 questions × 2 Mark</b>	<b>100</b>

## **1. General Awareness and Contemporary Issues**

- 1.1 Geographical, socio-cultural, economic and demography of Nepal
- 1.2 The Constitution of Nepal
- 1.3 Governance system and Government (Federal, Provincial and Local)
- 1.4 Government planning, budgeting and accounting system
- 1.5 Banking and financial sector of Nepal
- 1.6 Nepal Rastra Bank: history, objectives, organizational structure and functions
- 1.7 Current Macroeconomic situation of Nepal
- 1.8 Major events and current affairs of national and international importance
- 1.9 Minting in Nepal: history, current scenario and coins in Nepal

## **2. Mathematics**

- 2.1 Integers
- 2.2 Unitary Method
- 2.3 Fraction and Decimal
- 2.4 Simple Interest
- 2.5 Percentage
- 2.6 Profit and loss
- 2.7 Ratio and Proportion
- 2.8 Statistics (Mean, Median, Mode, Standard Deviation)
- 2.9 Indices
- 2.10 LCM/HCF

## **3. Introduction to Pantographs**

- 3.1 Definition and purpose
- 3.2 Types, equipment and tools used
- 3.3 Understanding the major components
- 3.4 Proper machine setup and calibration
- 3.5 Tooling selection and installation

## **4. Pantograph operation**

- 4.1 Basic machine operation and controls
- 4.2 Scaling and replicating designs accurately
- 4.3 Adjusting speed, depth, and other settings
- 4.4 Setting up the pantograph for resizing and reproducing 2D and 3D designs
- 4.5 Troubleshooting common operational issues

4.6 Electrical Components- Understanding electrical systems related to pantographs, Awareness of electrical hazards and Safe handling of electrical components

**5. Safety Procedures, Maintenance and record keeping**

5.1 Identifying potential hazards in the workplace

5.2 Safe handling of materials and tools

5.3 Emergency procedures and first aid

5.4 Regular machine maintenance

5.5 Cleaning and lubrication

5.6 Replacing worn-out parts

5.7 Record-keeping for maintenance tasks

5.8 Maintaining maintenance logs

5.9 Documenting inspections and repair