

**THE BSS SCHOOL**  
**SUBJECT: ROBOTICS & AI**  
**CLASS X**  
**2026-27**

**UNIT TEST**

PART I - 1. New Age Robotic Systems- Types of Robots, Cobots

**INTERNAL ASSESSMENT :** Python assignments and AI projects

**HALF-YEARLY EXAMINATION**

PART I - 2 : Components of Robots as a System

Introduction to Gears, Sensors, Actuators, Controllers and Integration

PART I - 3 : Visualization, Design and Creation of Components

(i) Application of Mechanical Block of Robotics.

(ii) Visualization of motion

PART II - 3 : Components of AI Project Framework :

Problem Scoping Understanding of problem

The Problem Statement Data Acquisition

Sources of Dataset in AI – Kaggle Platform Data Exploration

Bar graphs/ histograms, line graphs, scatter plots, pie charts.

PART II - 4. Introduction to Data and Programming with Python

(i) Modules and Packages. Scope and uses of packages, modules and libraries

(ii) Lists and Tuples in Python.

(iii) Strings operators, string in-built functions

**INTERNAL ASSESSMENT :** Python assignments and AI projects

**REHEARSAL EXAMINATION**

PART I - 4. Integrating Robots as a System Building simple robotic systems, wheeled mobile robot, Single Board Computer coding (Using TINKERCAD)

PART II - 1. Decision making in Machines/ Computers

PART II - 2. Machine Intelligence and Cybersecurity in Computing

Revision of Class IX and full syllabus

Solving model test papers

**\*\* (Subject to change.)**