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

UNIT TEST

PART I – 1 : Introduction to Robotics - Understanding Robots, Evolution of Robots; Laws of Robotics, Classification of Robots.

INTERNAL ASSESSMENT : Python assignments and AI projects

HALF-YEARLY EXAMINATION

PART I - 2 : Robot as a System
- (i) Building blocks of Robots
- (ii) Identification of Robots (through demonstration/ video/graphic details)

PART II - 1. Introduction to Artificial Intelligence (AI)
- (i) Meaning and brief history
- (ii) Applications and Benefits of AI
- (iii) Ethical considerations in AI

PART II - 2. Role of Data and Information, Evolution of Computing
- (i) Data and Information: Types of Data (audio, visual, numeric, text)
- (ii) Evolution of Computing: Binary Logic System, Conditional Gates

PART II - 3. Introduction to Data and Programming with Python
- (i) Familiarization with Python.
- (ii) Introduction to data types and variables.
- (iii) Introduction to Operators
- (iv) Conditional Statements

INTERNAL ASSESSMENT : Python assignments and AI projects

FINAL EXAMINATION

PART I – 3. Concepts in Robotics
- (i) Types of motion; motion in one-dimension and two-dimension
- (ii) Using links and joints to create specific motion
- (iii) Degree of freedom of a robot

PART II - 3. Introduction to Data and Programming with Python
- (v) Control Statements
- (vi) Functions - understanding of both built in and user defined functions

PART II - 4. AI Concepts and AI Project Framework
- (i) AI Concepts Broad and narrow AI, Computer vision (CV), Natural Language Processing (NLP) and NN.
- (ii) Components and Stages (alias AI Project Cycle)

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