# THE BSS SCHOOL Class – IX

## Subject – Robotics and AI (6<sup>th</sup> Subject)

### **Unit Test**

Unit 1 : Introduction to Robotics - Understanding Robots, Evolution, Classification, Applications

### **Half Yearly Examination**

- Unit 2: Robot as a System Building blocks of robot, Robot algorithm
- Unit 3: Concepts in robotics Robot anatomy, types of Motion, Links and joints
- Unit 4: Introduction to AI Meaning and brief history
- Unit 5: Role of Data and Information Data and Information, Evolution of Computing
- Unit 6: Introduction to Programming with Python –

Features, application areas, Interactive mode, script mode Data types and variables, Structure of Python program, Operators, expressions, simple programs

### **Final Examination**

- Unit 4: Application and benefits of AI, Ethical considerations in AI
- Unit 6: String data type in Python strings, list, tuple, string functions, conditional statements, control statements, loops, jump statements, functions, built-in functions, user defined functions. Sample programs.
- Unit 7 : AI Concepts and AI Project framework Machine learning, Expert systems, AI domains (Computer vision, NLP, Neural network), AI project life cycle

## **Full Python**