



**BASIC TECHNOLOGY SCHEME**  
**J.S.1**

S/N	TOPIC	CONTENT
1	Introduction to technology.	Definition, effect, range, importance, advantage, disadvantage, technological subject, basic technological areas, classes of technology and difference between the classes.
2	Workshop safety, rules and regulations.	Causes of accident in the workshop, accident prevention techniques, safety device measures, and fire outbreak in the workshop layout.
3(a)	Materials- wood	Identification of wood materials, classification of properties of wood materials, processing of wood, veneering and manufactured board as well as use of wood.
3(b)	Metals	Identification/ properties, classes, processing, forms of metal, forms of steel, casting, alloys, alloy steel and use of ferrous metals and nonferrous metals and the alloys.
3(c)	Ceramics	Identification/ properties, processing, uses, and ceramic products.
3(d)	Plastic	Definition/ properties, processing, uses, products and classes.
3(e)	Rubber	Definition/ properties, processing, uses, products and classes.
4	Drawing practice	Introduction to technical drawing, drawing instruments and materials, freehand sketching, scale drawing, lettering and board practice.
5	Wood work and hand tools.	Work bench and its appliance, measuring tools, marking out tools (setting out tools), driving tools, boring tools, wood work cutting and parting tools.
6	Energy and power.	Concept of energy, conservation of energy, properties of energy, forms and sources of energy, concept of power and calculations based on energy and power.
7	Machines	Definition, types, lever(parts and types), pulley, wedge, incline plane, screw jack, mechanical advantage, velocity ratio and efficiency of machines.

8	Machine maintenance	Definition, types and importance.
9	Basic concept of electricity.	Structure of atoms, electric charge, concept of electric current, electromagnetic force, potential difference, resistance, capacitor, factors Affecting capacitors and types of capacitors.
10	Magnets	Magnetic fields, laws of magnetism, methods of making magnets, conductors, Lenz law, Maxwell rule, Relationship between electricity and magnetism, loudspeaker and electronic works.
11	Food	
(a)	Storage	Definition, advantages and storage methods.
(b)	Preservation	Definition, methods of preservation and importance.