AMIE17 APPLIED ERGONOMICS

UNIT-1 HUMAN OUTPUT AND CONTROL

1.1 Physical work, manual material handling, motor skill, human control of systems, controls and data entry devices, hand tools and devices.

UNIT-2 WORKPLACE DESIGN

2.1 Applied anthropometry, workspace design and seating, arrangement of components within a physical space, interpersonal aspects of work place design,

2.2 Design of repetitive task, design of manual handling task, work capacity, stress, and fatigue.

UNIT-3 ENVIRONMENTAL CONDITIONS

3.1 Illumination, climate, noise, motion, sound, vibration, colour and aesthetic concepts.

UNIT-4 BIOMECHANICS

4.1 Biostatic mechanics, statics of rigid bodies, biodynamic mechanics, human body kinematics, kinetics, impact and collision.

UNIT-5 HUMAN FACTORS APPLICATIONS

5.1 Human error, accidents, human factors and the automobile, organizational and social aspects,

5.2 Steps according to ISO/DIS6385, OSHA"s approach, virtual environments.

Reference Books:

1. Bridger R S, Introduction to Ergonomics, Taylor and Francis, London, 2003.
2. Mayall W H, Indus trial Design for Engineers, London ILIFFEE Books Ltd., UK, 1998.
3. Mark S Sanders, Human Factors in Engineering and Design, McGraw Hill, New York, 1993.